

FLORIDA LAND STEWARD



A Quarterly Newsletter for Florida Landowners and Resource Professionals

SUMMER/FALL 2018 - VOLUME 7, NO. 3

IN THIS ISSUE

Bamboo Beware: Green Gold or False Promises?	2
Consultant Corner: Picking the Right Pine	3
Florida Tree Farm Program Preparing for 2019 Audit	5
Timber Price Update	6
Certified Forest Stewards and Tree Farmers	7

Sighting in the Northern Bobwhite Quail on Florida's Private Lands

By Don Buchanan and Arlo Kane, Private lands biologists, Landowner Assistance Program, Florida Fish and Wildlife Conservation Commission

The Florida Fish and Wildlife Conservation Commission (FWC) is sighting in on the restoration of native Northern Bobwhite Quail by partnering with private landowners to gain a better understanding of the distribution and abundance of bobwhite quail populations on private lands. Bobwhite quail populations across Florida have steadily declined for more than 50 years with estimated population losses in the millions. The FWC's Landowner Assistance Program works cooperatively with private landowners to restore bobwhite quail habitat. To stabilize and improve the current bobwhite quail populations across Florida, more information is needed.

To gather valuable information on Florida's bobwhite quail populations, the FWC has launched a new webpage: Northern Bobwhite Quail Sightings. It allows private landowners to record when and where they see or hear bobwhite quail on private lands. For privacy reasons, the locations of bobwhite quail entered will not be visible on the sightings page. However, location data will be used by FWC to help biologists better understand the current distribution of bobwhite quail populations in Florida. To date, over 530 sightings have been entered.

If you own land in Florida with bobwhite quail populations, or know someone who does, enter your sightings at <https://public.myfwc.com/HSC/Quail/GetLatLong.aspx>. This web page will also work on your mobile device, making it easy to collect information when you are in the field.

Private landowners who have released pen-raised bobwhite quail are asked not to add sightings for at least one year following their release. Pen-raised quail do not add to the wild breeding population, and in some ways, hinder wild populations.

Not only can you enter quail sightings but also those quail you hear. During the spring and summer, you may often hear the common "Bobwhite" call of males. During the fall and winter, quail at daybreak will often make a call to announce their



The Florida Fish and Wildlife Conservation Commission needs your help in restoring populations of native Northern bobwhite quail. Photo by Tom Dunkerton.



Funding for this publication is provided by the Florida Department of Agriculture and Consumer Services Florida Forest Service and a grant from the Sustainable Forestry Initiative.

An Equal Opportunity Institution.

Continued on next page

location to other coveys, called the “koi-lee” call. If you are not familiar with this call you can listen to it at <https://www.allaboutbirds.org/>. The “Koi-lee” call can also be heard in the evening or anytime coveys are broken up, but early morning is the most consistent time to here this call.

With a better understanding of where bobwhite quail occur across Florida's private lands, the FWC will be better equipped to allocate

resources to “sight in” on the target of restoring our native bobwhite populations to their former glory.

This project has already garnered attention from other states interested in restoring bobwhite quail populations. The web page will allow entries from anywhere in the nation. Georgia and New Jersey are already promoting the site to gather information on quail distribution in their states.

If you would like to speak with a professional biologist regarding managing or restoring Northern bobwhite quail habitat contact your local FWC Landowner Assistance Program regional biologist. Find your biologist here: <http://myfwc.com/conservation/special-initiatives/lap/contact-us/>.

Bamboo Beware: Green Gold or False Promises?

By Dr. Deah Lieurance, Assistant Extension Scientist, UF/IFAS Assessment of Non-native Plants in Florida's Natural Areas

In the wake of citrus decline and other challenges to Florida agriculture, a number of crops have emerged in the state as alternatives to more traditional commodities. Recently, there was some chatter in the news regarding bamboo plantings in Florida as a savior for the citrus industry (<http://www.wtsp.com/article/news/could-bamboo-help-save-floridas-citrus-industry-one-polk-grower-thinks-so/67-528579992>). One company, OnlyMoso, is promoting bamboo species as a lucrative cash crop to farmers across the state. With this increase in marketing, the UF/IFAS Assessment is contacted weekly by extension agents, master gardeners, and other concerned parties about the invasion risk and viability of bamboo production.

The UF/IFAS Assessment has led research on differences in the invasion risk of clumping and running bamboo. We have completed risk assessments on 47 bamboo species (Lieurance et al. 2018). The results are very clear. Running bamboos are inherently a greater invasion risk than clumping bamboos, but overall, the invasion risk of clumping bamboos is not as certain. Most clumping bamboo species received an “evaluate further” (caution) conclusion, meaning the model was

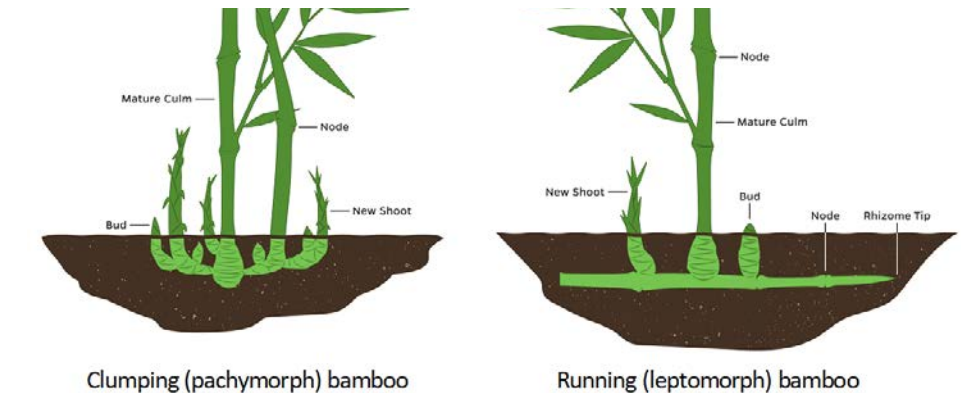


Figure 1: Clumping vs. running bamboo. Running bamboo species are generally a high risk for becoming invasive and not recommended.

not able to definitively place the invasion risk in either a high or low conclusion. Surprisingly it was also clear that relatively little research has been done on the ecology and general life history of bamboo species, particularly in the context of invasion. This leaves uncertainty in the future impacts of these species if they were to escape cultivation.

How does this relate to the current situation in Florida? The two species of bamboo that are being promoted by OnlyMoso are *Phyllostachys edulis* (giant moso bamboo), a temperate running bamboo; and *Dendrocalamus asper* (giant bamboo), a subtropical/tropical clumping bamboo. All *Phyllostachys* species are running bamboos. The rhizomes

of running bamboos spread laterally over long distances and form new rhizomes or culms at nodes (Figure 1). Both congeners *Phyllostachys aurea* and *Phyllostachys aureosulcata* are known invaders in the U.S. These plants invade natural areas, forming dense thickets that exclude native species, and often spread across property lines. Risk assessment analysis indicates *Phyllostachys edulis* is a **high risk** for invasion. The UF/IFAS Assessment recommends that this species **should not** be planted in Florida (<https://assessment.ifas.ufl.edu/assessments/phyllostachys-edulis/>). This is especially true in north Florida

Continued on page 5

Consultant Corner: Picking the Right Pine

By Leonard Wood, Jowett & Wood Foresters

Florida forest landowners face the decision of selecting the appropriate pine species to plant on their land. Among the factors that they should consider are soils, topography and drainage, regeneration, management objectives, nutrient needs, markets, physical location, and potential insect and disease problems. We will review some of these factors as they pertain to the three pine species that are most commonly planted in Florida.



Slash pine catkins, photo by Chris Evans, University of Illinois, Bugood.org

Slash Pine (*Pinus elliottii*)

Slash pine's range encompasses the entire state of Florida, with the *densa* variety being found only in south Florida and the Florida Keys. Slash pine is commonly planted on poorly drained to moderately well drained sandy soils with clay and/or organic hardpan subsoils. These sites range from wet savannahs to flatwoods, and generally require bedding for survival and best growth. Young slash pines planted on bedded sites are usually responsive to nitrogen and phosphorus fertilization, as well as herbaceous weed control. Note that, while bedding can enhance survival and growth on wet sites, bedding can have negative impacts on the groundcover seedbed. Landowners interested in promoting a diverse groundcover in pine stands should avoid bedding, especially on drier sites where it is not needed.

Slash pine can be highly susceptible to fusiform rust disease. Landowners planting slash pine should determine if their county is in an area that has a high probability of

fusiform rust infection and, if so, purchase seedlings that have a genetic resistance to the rust pathogen.

Prescribed fire can be introduced into slash stands, depending on the understory fuels, sometimes as early as age 10. Slash pine responds well to thinning and is capable of producing sawtimber and poles, products that require a longer rotation. In addition, pine straw production remains an option for owners of managed slash pine.

Loblolly Pine (*Pinus taeda*)

The range of loblolly pine in Florida extends from extreme west Florida to the Atlantic Ocean on the east and south to the Ocala area. As with slash, loblolly grows well on bedded sites with clay subsoils but also does well on moderately well drained and well drained upland soils, many of which are old agricultural sites. Note again that bedding is only beneficial for pine survival and growth on poorly drained sites.



Branch and trunk of slash pine. Note the spirally arranged primary leaves or scales that persist on the branchlets, giving them a rough surface after the needle fascicles have fallen. Photo by Niels Proctor, UF/IFAS.

Loblolly pine shows excellent response to fertilization and, in general, outperforms the other pines in growth if provided adequate nutrients. Loblolly is the most widely planted pine tree in the southeastern U.S. and has benefited from extensive genetic improvements in growth, form, and disease resistance.



Loblolly pine foliage and cone. The prickles on each cone scale point downwards toward the base of the cone and the connection to the branch. Photo by Niels Proctor, UF/IFAS.

Continued on next page

The major insect pest that attacks loblolly pine is the Southern Pine Beetle (SPB). Older and heavily stocked stands can be particularly susceptible to SPB. Thinning stands around 15 years of age or earlier, depending on the site and growth, can help decrease the risk of SPB infestation and will help the stand grow into larger, higher value trees.

Although loblolly generally grows faster than slash or longleaf pines, some solid wood product mills prefer slash and longleaf pines over loblolly pine. This is due to slash and longleaf pines' superior quality for structural lumber. Also, pine straw production in loblolly pine plantations is generally not an option as loblolly pine needles are too short to gather efficiently.

Longleaf Pine (*Pinus palustris*)

Longleaf pine is found across north Florida and south to Lake Okeechobee, on a wide range of sites. Once the dominant pine across its range in the U.S. south, it now only claims a small fraction of the acres where it was once found. Although it can be more resistant to disease and insect problems than slash and loblolly pines, it can still encounter issues so it is important to promote good forest health with periodic prescribed burning and thinning. Longleaf pine is the most adapted to fire and can be safely burned at a young age. Reforestation with longleaf has increased in the past 20 to 25 years due to techniques that improve seedling survival, public and private programs that promote longleaf pine reforestation, and the public's recognition of longleaf pine's importance in the southern landscape.

Longleaf is best established using chemical and mechanical site preparation, fire, and hand planting containerized seedlings. Longleaf hand planting costs are comparable to the cost of hand planting slash or loblolly, but container-grown longleaf trees are 40% to 50% more

expensive than container-grown slash or loblolly. Although it is usually planted on better-drained upland soils, we have had success planting longleaf on beds on somewhat poorly and poorly drained soils. Note that longleaf pine requires minimal vegetative competition. Longleaf seedlings will remain in the grass stage longer if the competition is not adequately controlled in the first 2-3 years.

Longleaf pine timber provides excellent solid wood products and can yield the highest proportion of pole-size timber of the 3 pines featured here. The market for longleaf pine straw has grown in recent years, and the sale of straw is another incentive to plant longleaf. In general, longleaf straw commands a premium over slash pine straw.

Conclusion: Consider Wood Markets

Landowners should consider their location and the availability of markets when reviewing their



A young longleaf pine as it begins to move out of the grass phase and gain height. Note the "white candle" bud at the top of the plant. Photo by Niels Proctor, UF/IFAS.

reforestation options. Because of location and number of end-user mills, timber markets are generally more competitive and stumpage prices higher across north Florida than in Central and South Florida. Landowners should factor in market prices and conditions when planning a forestry investment that may not realize a return for 15 to 20 years.

The UF/IFAS extension publications listed below provide detailed information that will be useful in species selection:

Common Pines of Florida
<http://edis.ifas.ufl.edu/fr003>

Using Soils to Guide Fertilizer Recommendations for Southern Pines
<http://edis.ifas.ufl.edu/fr053>

Longleaf Pine Regeneration
<http://edis.ifas.ufl.edu/fr064>

Get Email Updates!

Don't miss out on upcoming events and news! A lot happens between issues of this quarterly newsletter. Send an email to cde-mers@ufl.edu to be added to the stewardship listserv. Updates are sent every week or two and include the latest calendar of workshops, tours and other events; a link to the current issue of this newsletter; updates on cost-share and other assistance programs and resources; and other stewardship related news and information.

and in the larger Southeastern region as this species is more suitable for temperate climates. Because of this climatic requirement, it appears that OnlyMoso switched to marketing *Dendrocalamus asper* in central and south Florida. This species is better suited to Florida's tropical/sub-tropical climates. *Dendrocalamus asper* is a clumping bamboo that has a smaller footprint with short, thick rhizomes that curve upwards ending in a culm forming dense clumps with minimal spatial spread (Figure 1). Risk assessment resulted in a conclusion of evaluate further (caution), (<https://assessment.ifas.ufl.edu/assessments/dendrocalamus-asper/>). For this reason, we recommend that, even though this species has a lower invasion risk, growers should exercise caution when putting this species into production. In particular, many land managers have told me that bamboos, running or clumping, are very difficult to control. Herbicides have limited success in killing bamboo and often labor-intensive management techniques such as repeated cutting to exhaust the rhizome or simply digging up clumps are necessary to treat unwanted bamboo.

There are other concerns about planting bamboo as a commercial crop beyond invasion risks. First,

companies promoting commercial planting of bamboo are advertising expedited time to harvest (as soon as 36 months) and exaggerated returns on investment (\$7-30k per acre).

Daphne Lewis of the American Bamboo Society states that it takes approximately 10 years for bamboo plantings to produce culms large and hard enough for harvest. Any harvests before 10 years are unrealistic, even in ideal conditions. Second, little is known about the support structure for bamboo farmers. Other than representatives from the companies promoting bamboo, farmers have few resources to turn to, including who to contact regarding production questions, how to harvest efficiently, and market conditions for edible and timber bamboo products. Most extension agents are just now learning about bamboo as a crop. Traditionally, we deal with these species more in a horticultural context. However, extension agents across the Southeastern region where bamboo is being promoted are now coming together to collaborate and pool knowledge to provide reliable, factual information regarding bamboo as a cash crop. Results of this collaboration will be shared soon in extension

communications and at state and regional meetings.

In summation, running bamboos should be avoided for commercial, or even smaller scale horticultural planting in the Southeastern region and caution should be exercised when planting clumping bamboo in Florida. The jury is still out on how long it will take to turn a profit on an investment in bamboo acreage. Furthermore, Daphne Lewis advises "all prospective bamboo farmers to be cautious when considering opportunities that promise quick and substantial profit." See more information from Daphne Lewis here: <https://www.bamboofarmingusa.com/bamboo-scams>. You can access the conclusions of the IFAS Assessment from our website: <https://assessment.ifas.ufl.edu>.

Citations:

Lieurance, D., Cooper, A., Young, A.L., Gordon, D.R., Flory, S.L. 2018. Running bamboo species pose a greater invasion risk than clumping bamboo species in the continental United States. *Journal for Nature Conservation*. 43:39-45. doi.org/10.1016/j.jnc.2018.02.012

Florida Tree Farm Program Preparing for 2019 Audit

The Florida Tree Farm Program is preparing for a 2019 audit. The purpose of the audit is to verify that certified Tree Farms are compliant with the 2015-2020 Standards of Sustainability (<https://www.treefarmssystem.org/standards-review>). A relatively small sample of Tree Farms will be selected for the audit. The audit team will visit selected Tree Farms to review the landowners' management plans and conduct a brief interview. The inspector of the property and a Florida Tree

Farm Program representative will accompany the auditor. **We will begin the audit process in January 2019.** Selected sample Tree Farm landowners will receive a phone call in early January 2019.

The Florida Tree Farm Program is working toward facilitating a successful audit. As a part of that, it is extremely important for **ALL certified Tree Farms in the state to have a current written management plan.** Current means **updated in the last 5 years.**

Contact your Florida Forest Service County Forester, forestry consultant, or your Tree Farm District Representative if you need an update to your management plan, or if you have not been inspected since **2014**. Please share this information with fellow Tree Farmers that you are in contact with.

Find your Florida Forest Service County Forester at <http://freshfromflorida.com/> CountyForester

TIMBER PRICE UPDATE

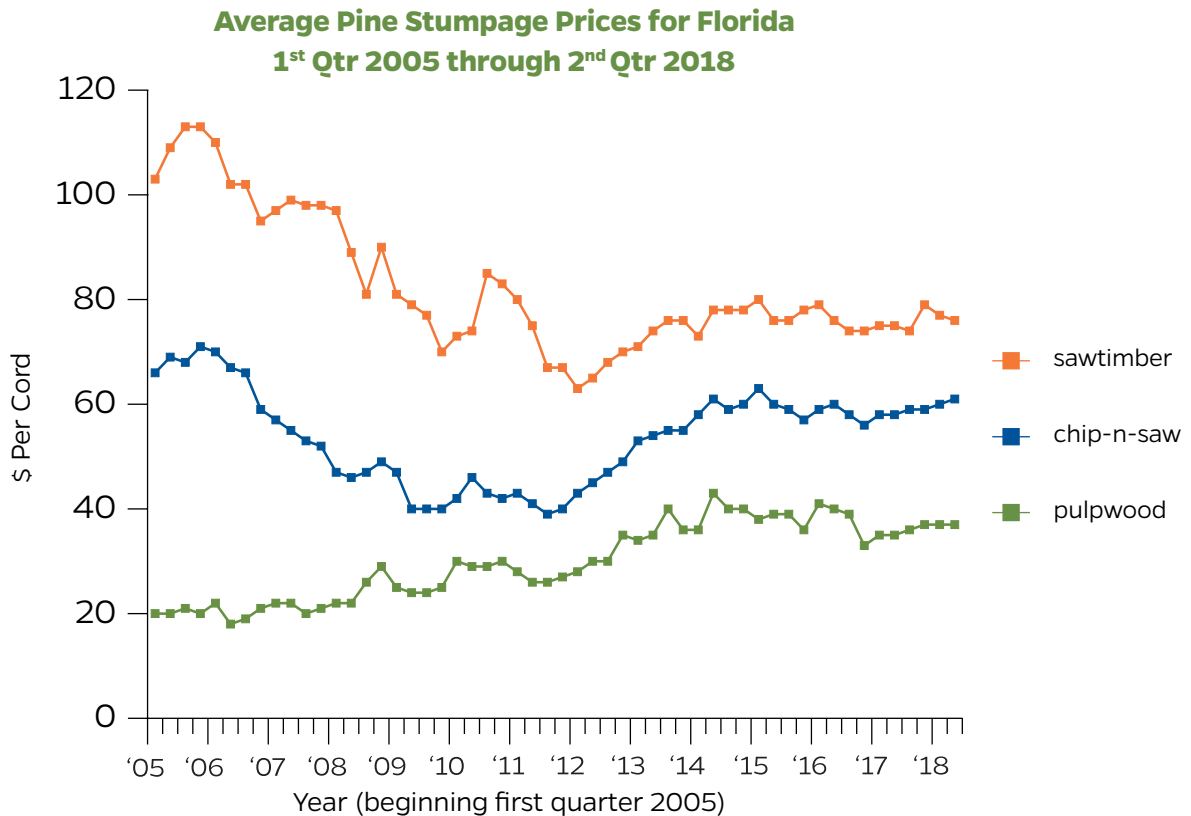
The timber pricing information below is useful for observing trends over time, but does not reflect current conditions at a particular location. Landowners considering a timber sale are advised to solicit the services of a consulting forester to obtain current local market conditions.

Average stumpage prices for the three major products in Florida, as reported in the **2nd Quarter 2018** Timber Mart-South report were:

Florida Stumpage Prices	
Pine pulpwood:	\$37/cord (\$14/ton), same as 1 st Qtr. 2018
Pine C-N-S:	\$61/cord (\$23/ton), ↑ slightly
Pine sawtimber:	\$76/cord (\$28/ton), ↓ slightly

Trend Report

Overall average forest product price trends again remain largely steady in Florida. Consistent with past second quarter trends, average prices for all products were down at the regional scale. It is interesting to note that, while sawtimber prices remain in a slump relative to pre-recession prices, Florida's average pine sawtimber price of \$28/ton is the highest in the region. The South-wide average price for pine sawtimber is \$24. Pine chip-in-saw also averaged highest in Florida for the 24th consecutive quarter. Also, southern pine lumber exports were up 60% relative to the same period last year. Overall, wood product market conditions in Florida and the greater region are good and improving.



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:

<https://www.freshfromflorida.com/Divisions-Offices/Florida-Forest-Service/For-Landowners/Programs/Forest-Stewardship-Program>

or

<http://floridaforest.org/programs/florida-tree-farm/>

These landowners have achieved certification in the Tree Farm, Forest Stewardship, and/or Forces Forest Programs and demonstrate excellent stewardship of their land resources.



Danny Webb with Cathy Hardin, Escambia County



Ernie Schluter with Cathy Hardin, Escambia County (correction from last issue)



James Neyman with Cathy Hardin, Escambia County



Fred and Mason Ahern, Putnam County



Eric Wadsworth, Santa Rosa County



Amy and Dan Elliott, Forest Stewards, Marion County



Scott Amberson, Escambia County



John and Laura Sobol, Putnam County



John Russell, Escambia County

Upcoming Stewardship, Small Farm and Other Events

Date	Event, Location, Contact
Aug 22	Florida Tree Farm Tour: Managing Pine Forests for Multiple Goals, Putnam County , 9:00 am to 12:00 pm ET, Crescent Lake Hunt Club, 843 East Highway 100, San Mateo, FL. Join us to explore the possibilities sustainable forestry and wildlife habitat management and connect with professionals and resources that are available to assist in you. Free, lunch provided. Provided by Florida Tree Farm and Forest Stewardship Programs. <i>Reserve a space by contacting Greg Dunn, Greg.Dunn@FreshFromFlorida.com, (904) 209-0430. Space will be limited so register soon.</i>
Aug 25	Family Heirs Property in Florida: "Cloudy Titles" 2018 Workshop Series - Session 5 , ask the expert session which will be held at the Grape Harvest festival. Registration is not required for the session, but there is a fee to enter the festival. <i>Here is the link for the festival: http://www.famunews.com/grape-harvest-festival/</i> <i>For more information, contact Sandra Thomson, Ed.D. at (850) 599-3546, sandra.thompson@famu.edu</i>
Aug 29-30	Florida Forestry Association Annual Meeting , Omni Amelia Island Plantation Resort. <i>See http://floridaforest.org/annual-meeting/ for details and registration, or contact Florida Forestry Association, (850) 222-5646, Whitney@ForestFla.org</i>
Sept 18	2018 Silviculture BMPs & Forestry Wildlife BMPs Workshop , 10 am to 3 pm ET, Southwest FL Water Mgmt District Office, 2379 Broad Street, Brooksville. Free workshop about Silviculture BMPs for Water Quality and the Forestry Wildlife BMPs for State Imperiled Species. Participants will receive 4 hours of SAF CAT-1 CFE's. Lunch on your own. <i>To register contact Robin Holland, (352) 732-1781, Robin.Holland@freshfromflorida.com</i>
Sept 20	Invasive Exotic Species and Control Workshop, Okeechobee County , 9:00 am to 3:00 pm ET, UF/IFAS Extension Okeechobee County Office, 458 Highway 98 North, Okeechobee, FL 34972. Provided by Heartland Cooperative Invasive Species Management Area and Florida Forest Stewardship Program. Join us to get the latest information on controlling some of the most troublesome invasive exotic plants in this region. 5.0 FDACS CEUs approved: (3.0) Nat. Area Weed Mgmt., Pvt. App. or ROW; (2.0) 487 or 482 Core. \$10 fee covers lunch and materials. <i>Register on-line at https://fsp-workshop092018.eventbrite.com/. You can also reserve a space by contacting UF/IFAS Extension Okeechobee County (863) 763-6469, and pay at the event with cash or check payable to University of Florida.</i>
Sept 28	Landowner Cooperative Associations - Neighbors Helping Neighbors, Madison County , 8:30 am to 4:00 pm ET, UF/IFAS Extension Madison County Office, 184 NW College Loop, Madison, FL 32340. Topics include cooperating to manage timber and wildlife, deer management, and the history and certification process of the American Tree Farm System. Free, lunch included. <i>Contact UF/IFAS Extension Madison County (850) 973- 4138 by September 21 to register.</i>

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:

Chris Demers (editor)
 UF/IFAS School of Forest Resources & Conservation
 (352) 846-2375 • cdemers@ufl.edu

Bonnie Stine (co-editor)
 Florida Forest Service
 (850) 681-5888 • Bonnie.Stine@freshfromflorida.com

Tony Grossman (co-editor)
 Florida Fish & Wildlife Conservation Commission
 Anthony.Grossman@myfwc.com

Dr. Michael Andreu (co-editor)
 UF/IFAS School of Forest Resources & Conservation
 (352) 846-0355 • mandreu@ufl.edu

Joseph Prenger (co-editor)
 U.S. Fish & Wildlife Service Partners Program
 (904) 731-3096 • Joseph_Prengrer@fws.gov

Jon Gould (co-editor), Florida Tree Farm Program
 (205) 296-4923 • gouldjh@bellsouth.net