In recent years restoration practitioners have become increasingly interested in restoring the structure and function of groundcover vegetative communities of species such as wiregrass. The Sand Hill Lakes Mitigation Bank (SLMB) is an area under experimental restoration for wiregrass and consists of approximately 2,155 acres in southern Washington Co. in the Florida Panhandle. The bank contains approximately 850 acres of wetlands, 155 acres of natural lakes and ponds, and 1,150 acres of upland buffer communities. Restoration activities to date include the re-introduction of fire, hydrologic restoration, sand hill restoration, and the restoration of hydric pine flatwoods.

Historically over 165 acres of hydric pine flatwoods occurred at the SHLMB, but in the absence of fire the area reverted to titi swamp. According to baseline monitoring in 2006, only 2 herbaceous species and 11 shrub species occurred on the disturbed hydric pine flatwoods habitat (Figure 2). Restoration activities were initiated in March of 2007. A Gyro-Trac was used to reduce the dense shrub cover to ground level followed by a burn in December of 2007. Herbicide treatments were employed over the next 4 years targeting shrub sprouts that emerged from stems and roots.

In 2008, wire grass plugs were established on 3’ centers within 165 acres of the hydric pine flatwoods restoration. In 2009, a supplemental planting of wire grass plugs occurred on 6’ centers and a two year burn cycle was established. This burn regime ensures that shrubs remain coppice sprouts while allowing grasses and sedges to thrive. In December and January of 2012/2013, the hydric pine flatwoods restoration was burned reducing vegetative cover to ground level. After several weeks, the wire grass plants were highly visible and easily differentiated from other grasses and sedges which provided an excellent opportunity to evaluate wire grass survival. Data was collected from Jan. – Feb. 2013 within 15, randomly established 1/10 acre circular plots located in each of the 5 restoration areas for a total of 75 plots. All wire grass plants showing signs of growth were counted within the plots. Wire grass seedlings if observed were counted and evaluated separately. Results indicate that on average of 70% planted wire grass survived since planting in 2008 and 2009. This translates to an average of 3,338 plants per acre (Figure 3). In addition, there was an average of 20 wire grass seedlings observed per acre.

Many of the restoration goals for the hydric pine flatwoods restoration have been met: a two year burn cycle has been established, shrub cover has been reduced to less than 3%, wiregrass has been re-established, and a total of 67 species common to hydric pine flatwoods have been observed (Figure 4). Together results are encouraging for the continued and long term success of the hydric pine flatwoods restoration. To learn more about the SLMB go to http://nwfmdwetlands.com/nwfmd/pdfs/brochure_062806compressed.pdf
Immediate and short-term response of understory fuels following mechanical mastication in a pine flatwoods site of Florida, USA


Mechanical fuel hazard reduction treatments are widely implemented in fire-prone ecosystems, but research evaluating their effects on fuel dynamics has focused only on woody-dominated post-treatment fuels. In the southeastern US, one of the most fire-prone regions of the world, mechanical fuels reduction is being increasingly used, yet the resulting fuelbeds have yet to be fully characterized for their fire risk. In order to broaden our understanding of the longevity and effectiveness of these treatments, mechanical mastication (“mowing”) was examined in a common pine ecosystem of the southeastern US Coastal Plain, where the post-mastication fuel environment was dominated by non-woody fuels. Fuel dynamics differed between recently burned mature stands, mature stands that had not burned for several years, and younger pine plantations. Foliar litter dominated (46–69%) the 17.1–23.1 Mg ha−1 of post-mastication surface fuels across these ecosystems, where pre-treatment understories were dominated by palmetto and gallberry shrubs. Although surface fuels compacted over time, the shrub layer recovered quickly, contributing to the result that stand-alone mechanical treatments did not reduce overall fuel loads. Increases in surface fuels followed by rapid shrub recovery may indicate short-term treatment efficacy, with narrow windows of opportunity for post-treatment fuel reduction burns. The fuelbed characteristics and fuel dynamics observed in these treated sites broaden our understanding of mechanical fuels reduction treatments in general, and provide the critical data for fuel model development.

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Upcoming Events


- **National Institute of Food and Agriculture: Climate Change Project Directors meeting to be held at the University of Florida in Gainesville, January 6-9, 2014.** To learn more and register contact Jessica Ireland at jgitireland@ufl.edu

- **Conservation Site Assessment & Planning—Natural Areas Training Academy, Anytime February-March 2014 and two day field trip on March 18-19** For more information go to [http://csap2014.eventbrite.com](http://csap2014.eventbrite.com)

- **Cogongrass Workshop, January 14, 2014 from 9:00 am to 5:00 pm, UF/IFAS North FL Research and Education Center, 155 Research Road, Quincy, FL 32351.** To be broadcast via Polycom to 6 other Florida locations. Details to come.

- **67th Society for Range Management Annual International Meeting, Technical Training and Trade Show will be held in Orlando, February 8-13, 2014.** To learn more go to [http://www.rangelands.org/orlando2014/index.html](http://www.rangelands.org/orlando2014/index.html)

Upcoming Events

- **Ignition Planning & Prescribed Fire Techniques for Wildlife**
  May 5-8, 2014 at the Cecil Commerce Center, 13561 Lake Newman Street, Jacksonville, Florida. This training combines classroom lectures, panel discussions, and field exercises on the use of Prescribed Fire as a management tool for a variety of wildlife and habitats. A full agenda and registration info is available on the chapter website: [http://fltws.org/](http://fltws.org/)

- **Mark your calendars - ACES: A Community on Ecosystem Services Conference**
  will be held December 8-11, 2014 in Washington DC. For more information go to [http://conference.ifas.ufl.edu/aces/](http://conference.ifas.ufl.edu/aces/)

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To develop and disseminate knowledge needed to conserve and manage Florida’s forest as a healthy, working ecosystem that provides social, ecological and economic benefits on a sustainable basis.

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Steering Committee Chair

**Newsletter Contacts**
Melissa Kreye, School of Forest Resources and Conservation, CFEOR Coordinator, mkreye@ufl.edu
Nancy Peterson, School of Forest Resources and Conservation, CFEOR Executive Director, njp@ufl.edu
Phone 352.846.0848 · Fax 352.846.1277 · PO Box 110410 · Gainesville, FL