Wet Prairie Restoration at the Lafayette Creek Wetland Restoration Site
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The Lafayette Creek Restoration Site is located between US331 and Highway 81, north of Highway 20 in Walton County, Florida. The tract lies within the Western Highlands physiographic region and is comprised of a series of rolling stream-dissected hills. The site is dominated by erosional remnant hills (likely remnant Pleistocene sand dunes or beaches), small deeply cut tributaries, steepheads and Lafayette Creek. The District acquired the 3,160-acre Lafayette Creek tract in late 2004 as part of its continuing commitment to protect and preserve water resources, especially freshwater flows into nearby LaGrange Bayou and Choctawhatchee Bay.

Phase 1 wetland and upland habitat restoration activities included 170 acres of xeric sand hill restoration and 54 acres of wet prairie restoration. The hydrology of the wet prairie is driven by seepage from the surrounding uplands. Historically the canopy of the wet prairie was sparse and included scattered pond pine (Pinus serotina), slash pine (Pinus elliottii), and sweetbay (Magnolia virginiana) while the understory was composed of a diverse grasses and forbes including threatened and endangered ground orchids, pitcher plants and butterworts. Prior to the initiation of restoration activities, the wet prairie had been converted to titi swamp in the absence of fire. Baseline monitoring revealed an overstory dominated by scattered pond and slash pine and 20-30 foot black titi (Cliftonia monophylla). The midstory was dominated by five shrub species including dense fetter bush (Lyonia lucida) and tall gall berry (Ilex coriaceae), and the understory was largely absent except in small scattered patches (Figure 1).

In July of 2012, a Gyro-Trac 25 XP (rotary mulcher) was used to reduce the shrubs to ground level. The Gyro-Trac’s low-ground pressure was very effective in the soft organic soils by reducing shrub cover without creating ruts. Following shrub reduction, seepage slopes were observed to flowing similarly to adjacent reference wet prairie within a week. In 2013, a warm season burn was used to remove remnant mulch and to stimulate the seed bank. Sprouting shrubs were treated annually with a herbicide solution (5% Triclopyr and 1% Imazapyr, plus 1% surfactant) in July for two years. The first annual monitoring event following the shrub reduction revealed 31 herbaceous wet prairie species including whitetop pitcher plant (Sarracenia leucophylla), a state endangered species. As the site developed over the next two years, grasses and sedges again dominated the understory. Pitcher plants and other insectivorous plants and several species of ground orchids have been observed. An August 2014 floristic survey revealed a significantly increased wet prairie herbaceous flora with 93 species common to reference wet prairies in the region (Figure 2). Of the herbaceous species observed, 10 were state listed species including eight threatened species (two orchid species, two butterwort species, one sundew, 2 pitcher plant species and a threatened sedge) and two endangered species, rose pogonia orchid (Pogonia bifaria) and white-top pitcher plant (Figure 3).
A Practical Approach for Translating Climate Change Adaptation Principles into Forest Management Actions


ABSTRACT: There is an ever-growing body of literature on forest management strategies for climate change adaptation; however, few frameworks have been presented for integrating these strategies with the real-world challenges of forest management. We have developed a structured approach for translating broad adaptation concepts into specific management actions and silvicultural practices for forest adaptation, as well as an associated set of resources to assist managers in using this approach. A variety of public, private, nongovernmental, and tribal natural resource managers are using this approach to develop projects that implement a diversity of adaptation actions while also meeting manager-identified goals. We describe how managers can integrate climate change information into management planning and activities and provide examples of real-world forest management projects that identify actions to help forests adapt to changing conditions.

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Upcoming Events

- **Florida Urban Forestry Council Symposium**: The Cost of Not Maintaining Trees, March 18-19. Patel Center of Global Sustainability, University of South Florida, Tampa, FL. Foresters, 12 Cat 1 SAF CFEs are approved. See link above for details and registration. Contact Sandy Temple, (407) 872-1738, fufc@aol.com

- **2015 Conference on Laurel Wilt Disease and Natural Ecosystems: Impacts, Mitigation and the Future**. June 16–18, 2015. This conference provides a timely opportunity to learn the most recent state of knowledge regarding laurel wilt, its biology, impacts in native ecosystems and efforts to mitigate for its devastating effects. Coral Springs Marriott, 11775 Heron Bay Blvd. Coral Springs, FL. Contact: Beth Miller-Tipton at bmt@ufl.edu or call 352-392-5930. [http://conference.ifas.ufl.edu/LaurelWilt/](http://conference.ifas.ufl.edu/LaurelWilt/)


- **Fire in Eastern Oak Forests Conference**. The 5th Fire in Eastern Oak Forests Conference will be held 27-29 May 2015 at the Bryant Conference Center on the University of Alabama campus in Tuscaloosa, Alabama. The goal of the Fire in Eastern Oak Forests Conference is to improve land stewardship through transfer of knowledge and technology of fire as a management tool and its role in a historical context. The conference brings together noted experts in research and management to present state-of-the-art information, perspectives, and syntheses on key issues and provides learning and networking opportunities to over 300 participants. [http://easternfire.as.ua.edu/](http://easternfire.as.ua.edu/)