CFEOR Meeting: Wednesday October 17th

There will be a CFEOR Steering, Science, and Outreach Committee meeting on Wednesday, October 17th from 9:30 to 4:00 at the Austin Cary Memorial Forest Conference Center in Gainesville, FL. Remember that each organization will be presenting a 3 minute overview of their prioritized research projects and future research needs.

Click here for Map and Directions to ACMF:
http://maps.google.com/maps?f=q&hl=en&geocode=&time=&date=&ttype=&q=10625+NE+Waldo+R&ie=UTF8&ll=29.620027,-81.995087&spn=0.855967,0.997009&z=10&iwloc=addr&om=1

Click here for map of ACMF and Conference Center:
http://sfrc.ufl.edu/handbook/ACMF_map.pdf

Agenda for CFEOR Science and Steering Committee Meeting

9:30-10:00 Welcome from Tim White
Introductions

10:00-12:00 CFEOR project presentations

12:00 - 12:30 Lunch

12:30 - 1:30 Research discussions from organization scientists and managers

1:30 – 2:30 Steering Committee Meeting (Education Building)
Science Committee Meeting (Conference Center)

2:30 – 3:45 Joint Steering and Science Committee Meeting (Conference Center)

3:45-4:00 Wrap-up from Mike Long

Upcoming Conferences

- 3rd Annual Florida Quail & Dove Management Short Course-UF/IFAS Extension
  October 19 at Turner-Civic Center in Arcadia, FL
  http://desoto.ifas.ufl.edu/Agricultural/wildlife_and_conservation.html
• **Confronting the Cogongrass Crisis Across the South**
  November 7-8 at Arthur R. Outlaw Mobile Convention Center in Mobile, AL

• **Public Land Acquisition & Management Partnership Conference**
  Hosted by the Southwest Florida Water Management District
  December 5-7 Hyatt Hotel in Sarasota, FL

**Recent Research Finding**

*Forest floor depth mediates understory vigor in xeric Pinus palustris ecosystems*

Longleaf pine (Pinus palustris) woodlands and savannas are among the most frequently burned ecosystems in the world with fire return intervals of 1-10 years. This fire regime has maintained high levels of biodiversity in terms of both species richness and endemism. Land use changes have reduced the area of this ecosystem by >95%, and inadequate fire frequencies threaten many of the remnants today. In the absence of frequent fire, rapid colonization of hardwoods and shrubs occurs, and a broad-leaved midstory develops. This midstory encroachment has been the focus of much research and management concern, largely based on the assumption that the midstory reduces understory plant diversity through direction competition via light interception. The general application of this mechanism of degradation is questionable, however, because midstory density, leaf area, and hardwood species composition vary substantially along a soil moisture gradient from mesic to extremely xeric sites.

Reanalysis of recently reported data from xeric longleaf pine communities suggests that the development of the forest floor, a less conspicuous change in forest structure, might cause a decline in plant biodiversity when forests remain unburned. We report here a test of the interactions among fire, litter accumulation, forest floor development, and midstory canopy density on understory plant diversity. Structural equation modeling showed that within xeric sites, forest floor development was the primary factor explaining decreased biodiversity. The only effects of midstory development on biodiversity were those mediated through forest floor development. Boundary line analysis of functional guilds of understory plants showed sensitivity to even minor development of the forest floor in the absence of fire.

These results challenge the prevailing management paradigm and suggest that within xeric longleaf pine communities, the primary focus of managed fire regime should be directed toward the restoration of forest floor characteristics rather than the introduction of high-intensity fires used to regulate midstory structure.