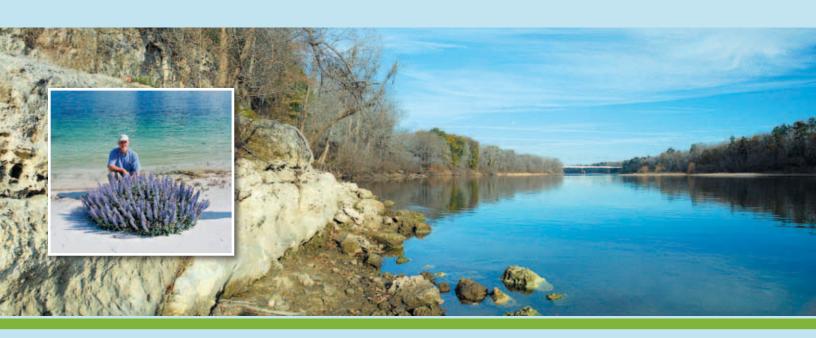


Adaptation and Protection of
Biodiversity in a Changing World

November 1 - 4, 2011 Tallahassee, FL USA







about Us

The Natural Areas Association

The Natural Areas Association (NAA) has, for over 30 years, provided support and vital resources to individuals and agencies concerned with the protection and stewardship of natural areas.

As defined by NAA's founder, George B. Fell, natural areas are "areas of land which have scientific, educational and esthetic value by reason of distinctive natural features."

NAA provides natural areas "defenders" with the tools and information they need to be successful, whether they are natural areas managers, educators, program staff or volunteers.

To support those who are committed to natural areas conservation, NAA:

- Publishes the Natural Areas Journal and the Natural Area News.
- Hosts the Natural Areas Conference.
- Develops special reports such as "The Status of State Natural Area Programs."
- Facilitates special programs and working groups such as the State and Federal Natural Area Programs Roundtables.
- Provides education and outreach to the land trust community.
- Serves as a portal to natural areas information and resources.
- ❖ Founded in 1980, NAA is a 501(c)(3) non-profit organization.

To become a member, donate or learn more about the Natural Areas Association, please visit www.naturalarea.org.

Thank you to George Willson for providing the beautiful cover (and many other) photos shown in this program!

Host



Supporting Nature's Caretakers. Providing Tools. Sharing Knowledge.

Co-Host



Sponsors

Thank you to all of our sponsors who make the Natural Areas Conference possible!



























Benefactors

Bureau Of Land Management

Visit Tallahassee

Underwriters

USDA Forest Service

Syngenta

Sponsors

National Park Service

USDA Forest Service – Southern Region

Supporters

National Park Service – Natural Resource Stewardship & Science

Conserved Forest Ecosystems: Outreach and Research

DuPont Land Management

Normandeau Associates, Inc.

The Southern Native Plant Restoration and Seed Increase Project

John Noel – Patron, Tennessee Natural Areas

Partners

Ecospatial Analysts, Inc.

Lewis Environmental Services, Inc.

Donors

The Longleaf Alliance

Tall Timbers Research Station & Land Conservancy

Additional Support

Island Press

Orion Magazine

The National Association of Exotic Pest Plant Councils

Conference Committee

Conference Organizers

Vickie Larson, Ecospatial Analysts, Inc.
Pete Colverson, Normandeau Associates
Ruark Cleary, Florida Fish and Wildlife
Conservation Commission
Bill Helferrich

NAA Conference Committee Deb Kraus, Renee Boronka and Brian Bowen

Program Chair

Pete Colverson, Normandeau Associates

Plenary Coordinator
Dana Bryan, Florida Division of Parks
and Recreation

Speaker Coordinator

Jack Stout, University of Central Florida

Poster Session Coordinator Joni Ellis, Optics for the Tropics

Student Activities Coordinators

Jody Shimp, *Illinois Conservation Commission*

Geoff Brown, Florida State University
Field Trip Chair

Ruark Cleary, Florida Fish and Wildlife Conservation Commission

Field Trip Coordinator

Parks Small, Florida Division of Parks and Recreation

Silent Auction Chair Bill Helferrich

Silent Auction Coordinator

Bill Cleckley, Northwest Florida Water Management District

Graphic Design Cheri Craft

Ouestions

Welcome

to Our State Capital – Tallahassee, Florida

We are pleased that you have joined us for the 38th Annual Natural Areas Conference, hosted by the Natural Areas Association, with co-host the National Association of Exotic Pest Plant Councils. Some great opportunities await you. Our conference program provides an assortment of topics of concern to natural area conservation and management well into the future. The invasive species management sessions will be lead by national experts prepared to share their lessons learned in invasives control.

Your opportunities for technical and scientific learning will be balanced with cultural, literary and social events throughout the week. Take some time to meet new friends and reacquaint with old ones. Many students are also in attendance, providing a great opportunity to network across generations!

Special thanks to our conference sponsors. Their generous support has made this event possible. In addition, we sincerely appreciate the generosity of our invited speakers and guests in contributing to the quality of your conference experience.

We hope that your Natural Areas Conference experience enhances your knowledge of our natural world and adds to your commitment of lifelong learning. We are glad you are here. Enjoy the conference and your time on the Florida Panhandle!

Natural areas Conference Planning Committee 2011

Information

The staff working the conference registration desk would be glad to help answer any questions that you might have. This is also the 'lost and found' location. A message board will be stationed near the registration desk or in the Exhibit area in the atrium.

Name Badges

Please wear your name badge to all conference events. It is your ticket to access symposia, sessions, breaks and socials.

Cell Phones

Please turn off cell phones during sessions as a courtesy to the presenter and other participants.

Meals

Your full conference registration fee Includes: coffee breaks, appetizers at the Exhibitor and Poster Session Wednesday evening, the field trip box lunch (pick up Thursday morning before departing), and if you confirm ahead of time, the Wednesday NAA membership luncheon and Thursday evening Awards Dinner and Auction. All other meals are on your own.

Auction

A variety of silent and live auction items will be displayed for your bidding pleasure beginning Tuesday afternoon. Bidding will close on silent auction items shortly before the Thursday evening Awards Dinner and Auction. Winning bidders must pay for their items on Thursday night. Arrangements can be made for shipping through NAA. All auction proceeds support the conference and the work of the Natural Areas Association.

Auction Donations

If you've brought items to donate to the auction, please drop them off at the registration table when you arrive, and no later than Wednesday at 2:00 pm. All donations are appreciated.

Exhibitors

Florida State University Conference Center foyer and atrium will be open daily from Tuesday morning through Friday evening to provide participants time to meet the exhibitors and browse their displays.

Field Trips

Full conference and Thursday daily registrants who pre-registered for a field trip will have a ticket in their name badge holder. If you have questions regarding your scheduled trip visit the conference registration desk. Changing field trips is discouraged but any changes must be made by 2:00 pm on Wednesday.

Student Awards

We want to thank those students who entered the student awards contest, and the awards sponsor, Ecospatial Analysts, Inc.

Conference T-Shirts

The official 38th Annual Natural Areas Conference T-shirts are only available at the NAA exhibit booth (while supplies last!). These 100% organic cotton shirts are printed with water-based ink and reflect our social and environmental values and, they make great gifts or souvenirs!

2011 Conference Schedule at a Glance



Monday, October 31, 4:00-7:00 pm – Registration is open at the Residence Inn

Tuesday, November 1		
Time	Session/Event	Room
7:30 am	Registration Opens	FSUCC Lobby
9:00 am - Noon	Federal Natural Area Roundtable and State Natural Area Roundtable	Residence Inn
9:00 am - Noon	Natural Areas Journal Editorial Board Meeting	Residence Inn
Noon	Lunch Break	
1:00 - 4:00 pm	Conference Welcome and Plenary Speakers: Lara Hansen and Jim Miller	208
2:45 - 3:15 pm	Mid-Afternoon Break	Foyer
4:00 - 5:00 pm	Plenary Speakers: Janisse Ray and Stuart Pimm	208
5:00 pm	Dinner on your own	
5:30 - 7:30 pm	NAEPPC Business Meeting	Residence Inn
7:30 - 9:00 pm	Nature Readings & Book Signing – featuring authors Janisse Ray, Lola Haskins and Julie Hauserman	208

Wednesda	ay, November 2	
Time	Session/Event	Room
7:30 am	Registration Opens	FSUCC Lobby
8:30 am - Noon	Symposia:	
	Adaptation and Management of Biodiversity	214
	Fire Management in the Era of Climate Change	205
	Restoration of Longleaf Systems	201
	Identifying and Mitigating the Invasion Risk of Bioenergy Crops	114
	Invasive Species; Early Detection, Rapid Assessment and Rapid Response	103
10:00 - 10:30 am	Mid-Morning Break	Foyer/Atrium
Noon	NAA Annual Membership Meeting and Luncheon (108) OR Lunch On Your Own	108
1:30 - 5:00 pm	Symposia:	
	Species and Community Conservation	214
	Fire Management in the Era of Climate Change (continued)	205
	All Taxa Invasive Species Issues	114
	Invasive Species; Early Detection, Rapid Assessment and Rapid Response	103
	Workshop: Restoration of Groundcover in Longleaf Systems	201
3:00 - 3:30 pm	Mid-Afternoon Break	Foyer/Atrium
6:00 - 8:00 pm	Exhibitor and Poster Session Social (Light hors d' oeuvres with cash bar) (Silent Auction Items on Display)	Foyer/Atrium

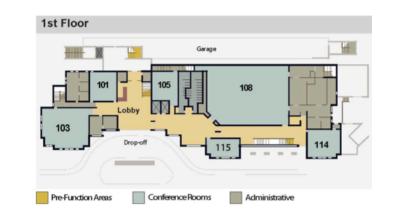
Thursday, November 3		
Time	Session/Event	Room
7:00 am	Registration Opens	FSUCC Lobby
8:40 am - 4:30 pm	Workshop: Biology and Control of Cogongrass - Research and Management Updates	101
7:30 am - 5:00 pm	Field Trips – Departure times vary. Check Field Trip Section for your field trip departure information. Pick up a box lunch!	FSUCC Lobby
6:00 - 10:00 pm	NAA Awards Dinner and Auction (Social with cash bar starts at 6:00)	108

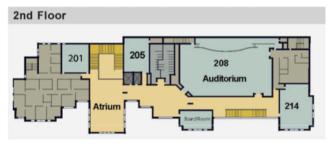
Time	Session/Event	Room
7:30 - 9:30 am	Registration Open	FSUCC Lobby
8:30 - Noon	Symposia	
	Invasive Plant Risks, Management and Restoration	214
	Tracking and Monitoring Species and Communities in Times of Change	101
	Workshop: Strategic Vegetation Management; Principles and Practices	114
	Workshop: Conservation Planning for Effective Action	205
8:30 - 10:00 am	Symposium: Restoration of Systems	201
10:00 - 10:30 am	Mid-Morning Break	Foyer/Atrium
10:30 am - Noon	Symposium: Natural History for Conservation	201
Noon	Lunch break	
1:30 - 3:00 pm	Symposium: Natural History for Conservation	201
1:30 - 5:00 pm	Symposia:	
	Invasive Plant Risks, Management and Restoration	214
	Conservation Planning for Effective Action	205
	Tracking and Monitoring Species and Communities in Times of Change	101
	Invasive Species Outreach and EPPC Roundtable	114
3:00 - 3:30 pm	Mid-Afternoon Break	Foyer/Atrium
3:30 - 5:00 pm	Symposium: Species and Conservation	201
5:00 pm	Sessions End and Conference Adjourns	

FLORIDA STATE UNIVERSITY

Augustus B. Turnbull III

FLORIDA STATE UNIVERSITY CONFERENCE CENTER (FSUCC)





2 38th Natural Areas Conference Program 38th Natural Areas Conference Program 3

Highlights

Opening Plenary Session – *Room 208*

1:00 pm Welcome NAA President Lisa Smith

1:15 pm

Dr. Lara Hansen, Are You Climate Savvy?: Getting Conservation and Resource Management on Track for Climate Change

2:00 pm

Dr. Jim Miller, Seventy-Five Years of Fighting Exotics in Southeastern Forests, from 1975-2050

2:45 pm Break

3:15 pm

Ms. Janisse Ray, From Cracker Childhood to Changing Climate: Nature, Community, and the Politics of Wholeness

4:00 pm

Dr. Stuart Pimm, Carbon and Climate Disruption, Losses of Forests and Biodiversity. Is Political Action Likely?

Special Meetings & Events

9:00 am

State Natural Area Roundtable Residence Inn

9:00 am

Federal Natural Area Roundtable Residence Inn

9:00 am

Natural Areas Journal Editorial Board Meeting Residence Inn

5:30 pm - 7:30 pm NAEPPC Business Meeting Residence Inn

7:30 pm - 9:00 pm Nature Readings & Book Signing featuring Janisse Ray, Lola Haskins and Julie Hauserman Room 208 Tuesday, November 1, 2011 Plenary Speakers

Are You Climate Savvy?: Getting Conservation and Resource Management on Track for Climate Change



Lara J. Hansen, Ph.D.

Lara Hansen thinks climate change is everybody's problem, and she wishes someone would bother to do something about it. Her desire for action led her to co-create EcoAdapt with a team of similarly inclined folks in 2008. She serves as Executive Director and Chief Scientist of this fine organization.

Dr. Hansen is co-author and editor of one of the earliest texts on the issue of natural system adaptation to climate change, Buying Time: A User's Manual for Building Resistance and Resilience to Climate Change in Natural Systems, as well as co-author of one of the newest books on adaptation, Climate Savvy: Adapting Conservation and Resource Management to a Changing World. The team that created these books created an engaged stakeholder process (first known as Climate Camp; now known as Awareness to Action Workshops) to help resource managers create adaptation strategies applicable to their work.

Dr. Hansen serves on the unfairly maligned, vitally important Nobel Prize-winning Intergovernmental Panel on Climate Change, is a Switzer Environmental Fellow and a United States Environmental Protection Agency Bronze Medalist. Prior to creating EcoAdapt, she was the chief climate change scientist for the World Wildlife Fund, creating their international Climate Change Impacts and Adaptation Program, from 2001-2008, and a Research Ecologist with the Environmental Protection Agency from 1998-2001. She earned her Ph.D. at the University of California, Davis in Ecology and her B.A. in Biology at the University of California, Santa Cruz. Because she's an optimist, she assumes we'll get our acts together on climate change. Because who would want the alternative?

Seventy-Five Years of Fighting Exotics in Southeastern Forests, from 1975-2050



James Miller, Ph.D.

James (Jim) Miller has been a Senior Research Ecologist with the U.S. Forest Service, Southern Research Station since 1977 at a lab on the Auburn University Campus, and Affiliate Professor of Forestry with Auburn University's School of Forestry and Wildlife Sciences for the same period. lim has responsibility for invasive plant research for the Southern Region of the Forest Service. He has published over 100 scientific and popular articles and books. Most noteworthy are a series of reports on the region-wide COMProject, with 13 study sites in seven states, now in its 25th year of studying the influences of woody and herbaceous plants growing in loblolly pine

Dr. Miller's books include Forest Plants of the Southeast and Their Wildlife Uses, co-written with Dr. Karl Miller, University of Georgia; and Nonnative Invasive Plants of Southern Forests: A Field Guide for Identification and Control. He travels widely to speak on the predicament of invasive species and the ecological and socioeconomic dilemmas they present and works at the national, regional and state levels to organize efforts to manage the ongoing invasions. He currently leads a Regional Task Force on Invasive Species, which includes all branches of the Forest Service, to identify the alien invasive species that most threaten Southern forest sustainability.

From Cracker Childhood to Changing Climate: Nature, Community, and the Politics of Wholeness



Janisse Ray

Writer, naturalist and activist Janisse Ray is author of four books of literary nonfiction and a collection of nature poetry. She is on the faculty of Chatham University's low-residency MFA program and is a Woodrow Wilson Visiting Fellow. She holds an MFA from the University of Montana, and in 2007 was awarded an honorary doctorate from Unity College in Maine.

Ecology of a Cracker Childhood, a memoir about growing up on a junkyard in the ruined longleaf pine ecosystem of the Southeast, was published by Milkweed Editions in 1999. Besides being a plea to protect and restore the glorious pine flatwoods of the South, the book looks hard at family, mental illness, poverty and fundamentalist religion. Essayist Wendell Berry called the book "well done and deeply moving." Anne Raver of The New York Times said of Janisse Ray, "The forests of the South find their Rachel Carson."

Ms. Ray has won a Southeastern Booksellers Award for Poetry 2011, Southeastern Booksellers Award for Nonfiction 1999, an American Book Award 2000, the Southern Environmental Law Center 2000 Award for Outstanding Writing, and a Southern Book Critics Circle Award 2000. Ecology of a Cracker Childhood was a New York Times Notable Book and was chosen as the Book All Georgians Should Read.

Janisse Ray attempts to live a simple, sustainable life on a farm in southern Georgia with her husband, Raven Waters. She is an organic gardener, tender of farm animals, slow-food cook and seed-saver. She lectures widely on nature, community, agriculture, wildness, sustainability and the politics of wholeness.

Carbon and Climate Disruption, Losses of Forests and Biodiversity. Is Political Action Likely?



Dr. Stuart Pimm

Professor Pimm is considered one of the world's leading conservation scientists. His work ranges from highly theoretical explanations of the structure of ecological communities to practical work to protect and manage endangered ecosystems.

Pimm became a conservation biologist watching species become extinct in Hawaii in the 1970s. That experience led to his commitment to study the scientific issues behind the global loss of biological diversity. Pimm has written over 150 scientific papers, including three review articles in Nature and Science and four books, including The Balance of Nature? Ecological Issues in the Conservation of Species and Communities and his new global assessment of biodiversity's future, The World According to Pimm: A Scientist Audits the Earth. His research covers the reasons why species become extinct, how fast they do so, the global patterns of habitat loss and species extinction, the role of introduced species in causing extinction and, importantly, the management consequences of this research. His commitment to the interface between science and policy has lead to his testimony to both House and Senate Committees on the re-authorization of the Endangered Species Act.

Pimm's current work includes studies of endangered species and ecosystem restoration in the Florida Everglades, and setting priorities for protected areas in the Atlantic Coast forest of Brazil (one of the world's hotspots for threatened species).

Stuart Pimm's awards include a Pew Scholarship for Conservation and the Environment (in 1993) and an Aldo Leopold Leadership Fellowship (in 1999). The Institute of Scientific Information recognized him in 2002 as one of the world's most highly cited scientists. In 2004, Pimm was elected to the American Academy of Arts and Sciences. He was awarded the Tyler Prize for Environmental Achievement in 2010 in recognition of his contributions to conservation science and the application of theory and technology to conservation biology. In particular, he was honored for his work to delineate the structures of ecological food webs, for his contribution to our understanding of the consequences of losses in species diversity, and for theory and empirical analysis to address the conservation of endangered species.

Nature Readings and Book Signing

7:30 pm FSUCC Room 208
Presented by NAA and Orion

Three very talented, nationally recognized authors; Janisse Ray, Lola Haskins and Julie Hauserman, will share perspectives of nature and the environment in excerpts from their prose and poetry. Books will be available for purchase and authors will be available for signing following the readings.

This event is FREE and open to the public. Seating is general admission.

Exhibitors

Come visit and see the wide array of services, programs and products.

Thank you to our Natural Areas Conference 2011 Exhibitors; they also play a key role in helping the NAA underwrite the cost of the conference.

AG - Renewal, Inc.
Aquatic Plants of Florida, Inc.
Conserved Forest Ecosystems:
Outreach and Research
Dupont Land Management
Eco-Pak
Florida Natural Areas Inventory
Invasive Plant Control, Inc.

Island Press NAEPPC

NatureServe

National Natural Landmarks Program
National Park Service

Natural Areas Association

Normandeau Associates, Inc.

Society for Range Management – Florida Section

Southern Native Plant Restoration and Seed Increase Project

Truax Company

USDA Forest Service – Southern Region USDA NRCS Plant Materials Program

Wednesday, November 2, 2011 Program Sessions



Wednesday, Novem	ber 2, 2011	
7:30 am - 6:00 pm	Registration Open (FSUCC)	
Topic →	Symposium: Adaptation & Management of Biodiversity	Symposium: Fire Management in the Era of Climate Change
Coordinators →	Coordinator: Doug Parsons, FWC	Coordinator: Zach Prusak, TNC
Room Number →	214	205
8:30 am	Patty Glick: Climate Change Adaptation for Biodiversity Conservation: Setting the Stage.	Mary Huffman: Fire, Carbon and Climate Change: status of the science today
9:00 am	Natalie Dubouis: Vulnerability Assessment of Key Florida Species.	Sharon Hermann: How effective are attempts to prescribe natural fire regimes in a modern landscape?
9:30 am	Livia Kent: Climate Adaptation Knowledge Exchange (CAKE): An Online Tool to Incorporate Adaptation into your Conservation Planning	Tracy Hmielowski: How season, ignition and frequency of prescribed fire influence fire behavior and hardwood resprouting in a southeastern pine forest
10:00 am	Mid-Morning Break	
10:30 am	Kim Penn: National Fish, Wildlife, and Plants Climate Adaptation Strategy.	Raelene Crandall: Mechanisms influencing co-occurrence of congeneric reseeders and resprouters (Hypericum spp.) in frequently-burned pine savannas
11:00 am	Jon Oetting/Tom Hoctor: Effects of Climate Change and Sea Level Rise on Florida Biodiversity Conservation Priorities	Kevin Robertson: Effects of fire frequency on ecosystem carbon storage in a southeastern US coastal plain, old-field, pine forest
11:30 am	Beth Stys: Adaptation Planning at a state wildlife agency.	C. Ross Hinkle: Integrating carbon sequestration and storage considerations with restoration and management of pine flatwoods in central Florida
12:00 pm - 1:15 pm NAA Annual Me	mbership Meeting and Luncheon (Room 108) or Lunc	ch On Your Own
Topic →	Species and Community Conservation	Symposium: Fire Management in the Era of Climate Change
Coordinators →	Moderator: Doug Parsons, FWC	Continued
Room Number →	214	205
1:30 pm	Peter Dunwiddie: Lessons in rare species conservation: Successes and Failures restoring populations of Castilleja levisecta	Jean Huffman: Fire history of a Central Florida pine savanna landscape: 1784-2005
2:00 pm	Jennifer R. Neale: Ecological Niche Models used to guide future conservation of a rare species	John Kush: Pines and paradigms: longleaf pine for a changing climate
2:30 pm	Randy Kennedy: Hawaii's plant extinction prevention program	Eric Menges: Consequences of alternative land management approaches on plants in Florida scrub
3:00 pm	Mid-Afternoon Break	
3:30 pm	Gary Cochran: A tiered model for developing an optimal boundary for conservation lands	S. Luke Flory: Invasive grass (Microstegium vimineum) increases fire intensity and reduces tree regeneration in eastern forests
4:00 pm	Janet Grabowski: An evaluaton of bioengineering techniques to establish woody vegetation along the margins of retored wetlands on phosphate mineland in Florida	William Conrad: Reintroducing fire to support succession in urban wildlands
4:30 pm	Jens Jensen: Restoration conversion of boreal forest wetlands in Superior, Wisconsin	Dave Moorhead: Prescribed fire and invasive plant management









Devilse 125 Mes 125 Me	Service Service 1		
Wednesday, November 2, 2011			
7:30 am - 6:00 pm	Registration Open (FSUCC)		
Symposium: Restoration of Longleaf Systems	Symposium: Identifying and Mitigating the Invasion Risk of Bioenergy Crops	Symposium: Invasive Species; Early Detection, Rapid Assessment and Rapid Response	
Coordinator: Lisa Samuelson, USFS Southern Research Station	Coordinator: Jacob Barney Ph.D., Virginia Tech	Coordinator: Chuck Bargeron, UGA	
201	114	103	
Paul Trianosky: Landowner engagement in the longleaf ecosystem – new approaches to reach family forest owners	Jacob Barney: Identifying and Mitigating the Invasion Risk of Bioenergy Crops	Randy Westbrooks: Blueprint for Development of National Early Detection and Rapid Response Systems for Invasive Plants in the United States and Canada	
Wendell Cropper (UF): LLP and climate modeling	Lauren D. Quinn: Documenting Invasiveness in <i>Miscanthus sinensis</i> : Should The Bioenergy Industry be Concerned?	Rebekah D. Wallace: EDDMapS National Invasive Plant Distribution Project	
Wayne Zipperer (USFS): Longleaf Pine and Urban Forests and Maintaining Forest Land in Forests	Richard D. Iverson: Regulation Of Biofuel Feedstocks: Protecting Ecological Interests Without Stifling Opportunities	Alycia W. Crall: Developing Cost-Effective Early Detection Networks: A Regional Model	
10:00 am	Mid-Morning Break		
Lisa Samuelson (Auburn University): Longleaf Pine and Carbon Sequestration	Rachel Bethke: Eradication Strategies for Potential Escapes in Bioenergy Production	Chris Evans: The CHIP-N Lower Ohio River Valley Survey Project: A Multistate Effort to Survey and Map Aquatic and Riparian Invasive Species	
Susana Sung (USFS): Longleaf Pine Rooting in Containers and Survival in the Hurricane Zone	Damian Allen: Commercial Development of Non-Invasive Seeded Miscanthus as a Viable Dedicated Biomass Crop	Elizabeth Brusati: Invasive Plant Risk-Mapping: A New Online Tool for Setting Regional Response Priorities	
Dale Brockway (USFS): Applying the Pro-B Method to Longleaf Pine Forests	Panel Discussion	Frank Pric:, Analysis and Maintenance of the Florida Invasive Plants Geodatabase	
12:00:00 pm - 1:15 pm NAA Annual Men	nbership Meeting and Luncheon (Room 108) or Lur	nch On Your Own	
Workshop: Restoration of Groundcover in Longleaf Systems	Symposium: All Taxa Invasive Species Issues	Invasive Species; Early Detection, Rapid Assessment and Rapid Response	
Coordinator: Holly Ober, UF	Coordinator: NAEPPC	Continued	
201	114	101	
Carol Denhof: The importance of native ecotype seed in longleaf understory restoration	Don C. Schmitz: The Establishment of the North American Invasive Species Network (NAISN) to Enhance the Coordination of Invasive Species Management in a Multi-Jurisdictional Environment	Cheryl B. Millett: Python Patrol: Bringing a Model of Early Detection Rapid Response to the Mainland of Florida.	
T.J. Savareno: South Carolina partners for the restoration of native plant communities: an attempt to increase the availability and use of native plant materials	John D. Cantlon: Healthy Habitats Coalition	Jennifer Dean: Tracking Invasive Species Management Efforts and Locations in New York with Volunteers and Professionals	
Emily Rodriguez: Maximizing wiregrass (Aristida stricta) reproduction for restoration purposes	TBD: Continental Dialogue on Non-Native Forest Insects and Diseases	Travis Gallo: Creating a Successful Citizen Science Model to Detect and Report Invasive Species	
3:00 pm	Mid-Afternoon Break		
Latimore Smith: Restoring native longleaf pine savanna groundcover in a former agricultural field: initial results of a pilot project in southeast Lousiana	Stephen Hight: Control Tactics Developed Against the Argentine Cactus Moth, Cactoblastis cactorum		
William Cleckley: Lessons learned from restoring groundcover to xeric sandhill, wet prairie, and wet pine flatwood habitats in Florida	Jeffrey Eickwort: Laurel Wilt Disease: current status of an exotic tree-killing insect and pathogen	Panel Discussion	
David Printiss: The sandhill phoenix – restoration at Apalachicola Bluffs and Ravies Preserve in Florida	Wayne A. Gardner: Invasion and spread of Megacopta cribaria in the SE US		
5:00 pm	Sessions End		

6 38th Natural Areas Conference Program 38th Natural Areas Conference Program 7

Wednesday, November 2, 2011



Symposium Descriptions

Symposium: Fire Management in the Era of Climate Change When: Wednesday, November 2, 8:30 am - 5:00 pm in Room 205

Leader: Zachary Prusak, The Nature Conservancy, Fire Manager for the Florida Chapter

Morning – The first part of this symposium will focus on the most recent science relating to both carbon storage/sequestration and carbon dioxide buildup in the atmosphere and how these might affect both wildfires and controlled burning.

Afternoon - Contributed papers on fire management.

From Florida to Saskatchewan, and from fire in urban landscapes to the wilderness, prescribed fire practitioners from many parts of North America will share observations and perspectives on fire management to improve the health of native systems.

Symposium: Invasive Species; Early Detection, Rapid Assessment and Rapid Response

When: Wednesday, November 2, 8:30 am - 5:00 pm in Room 103

Leader: Chuck Bargeron, University of Georgia

Even the best preventive efforts cannot stop all invasive species. Early Detection, Rapid Assessment and Rapid Response (EDRR) is a critical second defense against the establishment of invasive populations. EDRR increases the likelihood that localized invasive populations will be found, contained and eradicated before they become widely established. EDRR can slow range expansion and avoid the need for costly long-term control efforts. Volunteer networks, cooperative weed management areas and cooperative invasive species management areas serve as great first-line defenses for early detection and rapid response. This session will feature speakers from across the country and highlight several different data systems. It will conclude with a panel discussion and ways to work together to move forward.

Symposium: Adaptation and Management of Biodiversity

When: Wednesday, November 2, 8:30 am - Noon in Room 214

Leader: Doug Parsons, Florida Fish and Wildlife Conservation Commission

This symposium will host speakers focusing on the emerging field of adaptation in conservation planning. Adaptation strategies will need to be developed in response to the projected temperature increases associated with global climate change. Speakers will address new tools and resources available, while participants will see how adaptation planning cuts across all conservation sectors and requires new and innovative approaches to research and management. The symposium will feature representatives from government, non-profits, academia and the private sector, all on the cutting edge of adaptation planning.

Symposium: Restoration of Longleaf Systems

When: Wednesday, November 2, 8:30 am - Noon in Room 201 Leader: Lisa Samuelson, USFS Southern Research Station

Fire-dependent longleaf pine systems used to dominate landscapes in the southeast from North Carolina to east Texas and down to south-central Florida. Today, less than 2 percent of this native landscape still exists, and there is a major effort to restore areas to longleaf, with the rich groundcover and fauna that goes with it. This half-day symposium will focus on issues associated with longleaf pine trees for successful restoration projects. Many factors associated with genetics, local climate, changing climate, types of seedlings used and the interaction of carbon with long leaf systems impact both the rationale for and the success of any particular restoration project. Speakers for this symposium will represent the U.S. Forest Service Southern Research Station, as well as the University of Florida, Auburn University and the American Forest Foundation.









Symposium: Identifying and Mitigating the Invasion Risk of Bioenergy Crops

When: Wednesday, November 2, 8:30 am - Noon in Room 114

Leader: Jacob Barney, Ph.D., Virginia Tech

The emerging bioenergy sector will likely comprise crops that require minimal inputs, be tolerant of poor growing conditions, establish rapidly, and produce abundant biomass — traits shared by many of our worst invasive species. A combination of "invasive" traits and the scale of cultivation make bioenergy crops unique from traditional agronomic crops in their invasive potential. This symposium will bring together academics, industry representatives and government regulators to identify the potential for invasiveness in bioenergy crops, evaluate a case study of unintended consequences, give an overview of the regulatory framework, discuss the mitigation potential for escapes, and give insight into how the industry is taking active steps to reduce the invasion risk.

Symposium: Restoration of Groundcover in Longleaf Systems

When: Wednesday, November 2, 1:30 - 5:00 pm in Room 201

Leader: Dr. Holly Ober, Department of Wildlife Ecology and Conservation, University of Florida

Sponsor Conserved Forests, Education, Outreach and Research (CFEOR)

This symposium will be based on the handbook published in 2010 by CFEOR called Groundcover Restoration, In Forests of the Southeastern United States. Dr. Ober, together with Jennifer Trusty, coordinated publication of the handbook, which provides a summary of what is known about groundcover restoration based upon research and also provides a comprehensive listing of resources needed to complete a project. The research summary is grounded in the practical realities for successful upland restoration as learned by land managers across the state and region.

Partnered Field Trip (Recommended) FT-09 Longleaf Pine & Groundcover Restoration Techniques at Torreya State Park/Apalachicola Bluffs & Ravines Reserve

Symposium: All Taxa Invasive Species Issues

When: Wednesday, November 2, 1:30 - 5:00 pm in Room 114

Leader: NAEPPC (To be determined)

Not all invasive species issues have to do with plants. This session will feature speakers addressing animal- and disease-related invasive species issues pertaining to the Southeast and policy issues nationwide.

NAA Annual Membership Meeting and Luncheon

12:00 - 1:15 pm • Room 108

All NAA members are invited and encouraged to attend their annual meeting. If you RSVP'd 'yes' when you registered, we will have a complimentary lunch ready for you. If not, NAA members are welcome to attend but will not be served a lunch. The meeting agenda includes the NAA annual report to members, Board of Directors elections, the opportunity to network with other NAA members and to share your ideas. Please join us!







Poster Presentations

Wednesday, November 2, 2011 6:00 pm to 8:00 pm FSUCC – 2nd Floor

Megan Brown

Feral hog (Sus scrofa) disturbance in seepage slope wetlands, Eglin Airforce Base, Florida

David Burge

Arkansas wetland flora structure 2011

Gary Cochran

Conserving vital habitat in Osceola County using landscape scale strategies

Anne Cox

FNPS participation on florida land management review teams

James Cuda

Prospects for biological control of *Hygrophila polysperma*.

Dorothy Field

Helping birds help themselves

Lisa Giencke

Initial ground cover recovery following silvicultural treatments in a longleaf pine forest

John Gilbert

GIS technology as a path to restoration: mapping longleaf pine forests

Cynthia Grizzle

Innovative solution to flooding springs life to wetlands

Lauren Hart-Diepenbrock

Greater abundance and diversity of native coccinellids in agricultural grass-dominated habitats than natural tallgrass prairies

Rebecca Hileman

Changes in the Green Ash Research Natural Area

Shelly Johnson

Spatial patterns of biodiversity and ecosystem services in Florida

Travis Jones

Tree community succession within an isolated western Wisconsin preserve

Jordan Kiefer

Managing *Potamogeton crispus* abundance through whole-lake herbicide treatment: a case study from Mermet Lake, IL

Melissa Kreye

Valuing nutrient pollution prevention in well-conserved aquatic systems

Lucas Lee

Can rye cover crops limit Alliaria petiolata and promote prairie restoration in western Wisconsin?

Stacey Matrazzo

Determining the success of the Genius Preserve Cedar Grove restoration.

Amy McReynolds

Determining what seed to use in restoration

Joan O'Shaughnessy

Constructed gravel hill prairie: 16 years of vegetative monitoring

Take Pulfer

A first student pilot chapter of the NAA at the University of Wisconsin-Stout

Michael Ryon

Method for American lotus culture and growth

David Seals

Population status of the American black bear (Ursus americanus) in northeastern Alabama

Lindsay Shupert

Growth potential of *Achyranthes japonica*: response to light and moisture

James Snyder

Fire followed by flooding kills hardwood shrubs

Debra Tharp

Invasive threat analysis GIS model and map

Brenda Thomas

Reconstruction of the fire history of Wassaw National Wildlife Refuge, Savannah, GA

Camile Thorson

Revitalizing a campus natural area for training future natural areas professionals

Beth Wertschnig

Upland restoration of the pine flatwoods ecosystem: a look at groundcover restoration techniques and results

Daniel Wright

Species composition of a frequently burned mountain longleaf pine forest on the Talladega National Forest

Anna Zavadskaya

Conservation of unique ecosystems for ecotourism in Kamchatka



Thursday, November 3, 2011 Conference Field Trips

Look for your field trip ticket in your nametag holder showing your pre-registered field trip. If you have questions regarding your scheduled trip, visit the registration table from 7:30 am on Tuesday through 2:00 pm on Wednesday. No changes can be made after 2:00 pm on Wednesday.

Box lunches will be available beginning at 6:30 am in the FSUCC Lobby. Please pick up a lunch on your way to your field trip. Bring appropriate outdoor gear and we suggest bringing an extra bottle of water for the field trip. Vehicles will be parked at the FSUCC lobby entrance.

Please arrive at least 15 minutes before your scheduled departure. Vehicles will depart promptly at their announced times.

NAA Awards Dinn	er & Auction
6:00 pm • FSUCC Roo	om 108

Join us for a social with cash bar at 6:00 pm. This is a great opportunity to mingle with new and old friends and colleagues and to bid on a wide array of silent auction items (there is something for everyone!). The catered dinner will be served at 6:45 pm (for full-conference registrants who RSVP'd 'yes' during registration, and special guests; your ticket is in your name badge). The NAA will honor the recipients of the Carl N. Becker Stewardship Award and the George B. Fell Award, and NAEPPC will also present awards. Please join us in acknowledging these very deserving individuals. Plan to participate in the exciting live auction. Both auctions are great fun and help fund NAA programs.

Number	Description	Departure	Return
FT-01	Wade Tract Old Growth Longleaf	8:00 am	4:00 pm
FT-02	Apalachicola National Forest/ Tates Hell State Forest	7:30 am	5:00 pm
FT-03	Pitt, Sylvan, and Williford Springs	7:30 am	5:00 pm
FT-04	St. Marks National Wildlife Refuge	8:30 am	5:00 pm
FT-05	Great Florida Birding Trail	7:00 am	5:00 pm
FT-06	Native Plant Biodiversity	7:30 am	5:00 pm
FT-08	Wakulla Springs State Park	8:30 am	4:00 pm
FT-09	Torreya State Park/ Apalachicola Bluffs Reserve	7:00 am	5:00 pm
FT-11	Florida Caverns/ Falling Waters State Parks	7:30 am	5:00 pm
FT-14	Apalachee Wildlife Management Area	8:30 am	5:00 pm

Workshop – Biology and Control of Cogongrass: Research and Management Updates

8:40 am - 5:00 pm • FSUCC Room 101 • Coordinator: Nancy Loewenstein, Auburn University.

Please pick up your box lunch by 8:30 am in the FSUCC Lobby.

8:40 am	Overview of Regional Cogongrass Control Efforts – Jim Miller, USDA Forest Service, emeritus scientist
9:00 am	State Cogongrass Control Efforts in Florida and New Grant - Jeff Eickwort, Florida Division of Forestry
9:20 am	State Cogongrass Control Efforts in Georgia – Mark McClure, Georgia Forestry Commission
9:40 am	State Cogongrass Control Efforts in Alabama – Will Autry, Larson & McGowin, ACCC
10:00 am	Mid-Morning Break
10:20 am	State Cogongrass Control Efforts in Mississippi – Randy Chapin, Mississippi Forestry Commission
10:40 am	State Cogongrass Control Efforts in South Carolina – Tim Davis, SC Department of Plant Industry
11:00 am	Roundtable Panel Discussion - Dave Moorhead, University of Georgia, moderator
12:00 pm	Lunch Break
1:00 pm	Multiscale Ecological Understanding of Cogongrass: Landscape Genetics and Habitat Modeling – Rima Lucardi, Mississippi State University
1:20 pm	Cogongrass, Insect Biodiversity and Pine Decline - Nancy Loewenstein, Auburn University
1:40 pm	Integrated Approaches to Cogongrass Management in Florida: From Mines to Pastures – Greg McDonald, University of Florida
2:00 pm	Imazapyr and Glyphosate Herbicide Rate and Timing Responses for Cogongrass Management in Pine Forests – Pat Minogue, University of Florida
2:20 pm	Getting to the Root of the Problem: Cogongrass Patch Eradication is Possible – Jatinder Aulakh, Auburn University
2:40 pm	Mid-Afternoon Break
3:00 pm	Revegetation of Cogongrass Infested Habitats with Native Grass Species Following Herbicidal Treatment – Kome Onokpise, Florida A&M University
3:20 pm	Successful Cogongrass Suppression using Loblolly Pine Reforestation – Jim Miller, USDA Forest Service, emeritus scientist
3:40 pm	Where Do We Go From Here? – John Byrd, Mississippi State University
4:00 pm	Roundtable Panel Discussion – Dave Moorhead, moderator

Friday, November 4, 2011

Symposium Descriptions

Workshop: Conservation Planning for Effective Action

When: 8:30 am - Noon in Room 205

Leader: Jora Young, The Nature Conservancy, Director, Conservation Action Training

"The Conservation Measures Partnership" published an "open source" approach to conservation project planning and management in 2004 called "The Open Standards for the Practice of Conservation." In doing so, they established a common and usable approach to adaptively design and manage conservation projects to foster better conservation. Today thousands of project teams all over the world are applying the Open Standards in hundreds of distinct (yet recognizable) ways to develop strategies and measures and manage their conservation projects. One important outgrowth of this work was the establishment of the Conservation Coaches Network (CCNet), almost 300 trained coaches from 59 countries and 39 organizations. The CCCNet has catalyzed effective conservation projects worldwide by supporting teams in the practice of the Open Standards, and sharing knowledge, best practices and innovation.

Join us in this interactive workshop to explore the basic steps in the "Open Standards," learn more about the Conservation Coaches Network, and see if you, too would like to be part of this "open source" movement.

Following the workshop, this session will continue as a symposium with six papers being presented about conservation planning in action.

Workshop: Strategic Vegetation Management; Principles and Practices

When: 8:30 am - Noon in Room 114

Leader: Linda C. Duever, Conway Conservation LLC

Strategic Vegetation Management (SVM) TM is a holistic, long-term method of achieving land management goals by persuading nature to do most of the work. The key to SVM is an adaptive management approach that uses strategically applied interventions to promote the competitiveness of desired species while exploiting the vulnerabilities of problematic species. SVM is an effort to assist managers to get to the cause of problems rather than applying treatments to deal with symptoms. SVM allows land managers to adjust to today's unpredictable funding levels and extreme weather by adapting priorities to evolving circumstances instead of a reliance on plans oriented around rigid budgets and schedules. The method is highly dependent upon the observational skills of managers and then using strike force mechanisms to quickly respond to changing conditions.

This will be an interactive workshop providing participants with plenty of opportunities to learn about SVM and also to provide input to the presenters to help them further develop the methodology.

Symposium: Tracking and Monitoring Species and Communities in Times of Change.

When: 8:30 am - 5:00 pm in Room 101

Leader: Dan Hipes, Florida Natural Areas Inventory

Understanding the distribution of species and communities on the landscape, and how these elements of biodiversity change over time has always been a fundamental part of conservation planning. Such knowledge is even more important in a changing world: familiar threats such as habitat loss are now compounded by the unprecedented peril of global climate change and the ever-growing menace of invasive exotic species.

Understanding the science behind these issues today is not enough. In the face of diminishing funding for natural resource management it is imperative to communicate a message of efficient conservation land management to a larger audience. This session will explore novel approaches to tracking and monitoring species and communities, examples of new information management tools that help inform land management decision making, and an innovative new web tool that delivers science-based conservation information for the U.S.

Symposium: Invasive Plant Risks, Management and Restoration

When: 8:30 am - 5:00 pm in Room 214

Leader: Dr. David Moorhead, University of Georgia

Contributed papers covering the entire range of invasive plant management from chemical to biological control, as well as what you do once the species is controlled. Other speakers will demonstrate new tools for risk assessment, modeling and decision support/expert systems.

Symposium: Invasive Species Outreach and EPPC Roundtable

When: 1:30 pm - 5:00 pm in Room 114 Leader: NAEPPC (To be determined)

Education and outreach are imperative to implementing a successful invasive species program. This session will highlight three programs and end with a roundtable discussion on other programs that individual EPPCs and IPCs are developing.

Friday Program Sessions

Friday, Novemb	er 4, 2011		
7:30 - 9:30 am	Registration Open		
Topic →	Symposium: Adaptation & Management of Biodiversity	Workshop: Conservation Planning for Effective Action	
Coordinators →	Coordinator: David Moorhead, UGA	Coordinator: Jora Young, TNC	
Room Number →	214	205	
8:30 am	Richard Roberts: Eight Year Monitoring of Non-Native Vegetation in a Riparian Forest in Southeast Florida		
9:00 am	Cheryl Millett: Accuracy of a Modified New Zealand Aquatic Weed Risk Assessment for the U.S.	Workshop	
9:30 am	Colette Jacon: Movements of Natural Area Plants within the Greater Caribbean: New Invasive Species or Newly Invadible Habitats.		
10:00 am	Mid-Morning Break		
	Symposium: Invasive Plant Risks, Management and Restoration	Workshop: Conservation Planning for Effective Action	
	Continued	Continued	
10:30 am	James P. Cuda: Integrated Management of cogongrass, Imperata cylindrica (Poaceae): Prospects for Biological Control		
11:00 am	Mark Schwarzlaender: Evaluating regional impact of weed biological control using the Standardized Impact Monitoring Protocol (SIMP)	Workshop	
11:30 am	Hariet L. Hinz: Successes we might never have had: a retrospective comparison of predicted versus realized host range of established weed biological control agents in North America		
12:00 pm	Lunch Break		
	Invasive Plant Risks, Management and Restoration	Conservation Planning for Effective Action	
	Continued	Moderator: Marcia Brown	
1:30 pm	Lee Patrick: Web Based Tools For Invasive Species Management	Aubrey Phillips: Lessons from transitioning to adaptive management on conservation lands	
2:00 pm	Philip Lee: The Impact of Invasive Beachgrasses on The Flora of a Coastal Dune Complex within Pacific Rim National Park Reserve, British Columbia and Its Subsequent Restoration	Holly Ober: Collaborative Solutions for sponsoring cutting-edge research and effective communication on important land management issues in Florida	
2:30 pm	Greg MacDonald: Restoration Strategies For Cogongrass (Imperata Cylindrica) Infested Minelands In Florida	Bill Wilcox: Will the public-private management partnership work?	
3:00 pm	Mid-Afternoon Break		
•	Invasive Species	Conservation Planning for Effective Action	
	Continued	Continued	
3:30 pm	Kimberly Bohn: Assessing the Timing and Sequence of Prescribed Fire and Herbicide Applications on the Control of the Invasive Japanese Climbing Fern in Florida's Natural Areas	Jonathon Miller: Nutrient quality of the Little Choctawatchee River, Alabama: A pre-dam assessment	
4:00 pm	Anna Greis: Effects Of Aminocyclopyrachlor on Invasive Species and Native Plants of Florida	Amy Knight: Decision Support Tools to inform priorities and measure progress of the Florida Forever Program	
4:30 pm		Vickie Larson: Can regional conservation design abate the effects of global climate change?	
5:00 pm	Sessions End and Conference Adjourns		

	/011	
Friday, November 4, 2	Registration Open	
Restoration of Systems	Workshop: Strategic Vegetation Management;	Symposium: Tracking and Monitoring Species
Restoration of Systems	Principles and Practices	and Communities in Times of Change
Moderator: Dennis Hardin, Florida Forest Service	Coordinator: Linda Duever, Conway Conservation LLC	Coordinator: Gary Knight, FNAI Moderator: Dan Hipes
201	114	101
Michael Ryon: Restoratation of a PCB Impacted pond ecosystem		Dan Hipes: Natural Community Mapping and Reference Natural Communities: Establishing Baselines and Determining Desired Future Condition.
Mike Duever: Hydrologic Impacts from a large canal and subsequent recovery following filling (in Big Cypress Swamp)	Workshop	Kathleen Swanson: Objective-Based Vegetation Management: An Approach to Natural Community Management.
Gary Milano: Barrier Island ecosystem restoration: Dune, coastal strand, maritime hammock and wetlands community habitat restoration		
10:00 am	Mid-Morning Break	
Natural History for Conservation	Workshop: Strategic Vegetation Management; Principles and Practices	Workshop: Monitoring & Tracking EORs
Moderator: Dana Bryan, Florida State Parks	Continued	Continued
John Taggart: Soil factors in 3 populations of endangered golden sedge (Carex lutea)		Kent Williges: Restoring Native Ground Cover in Degraded Pine Flatwoods Ecosystems.
Don Bragg: Arboreal composition and biomass of unmanaged pine-dominated natural areas in southern Arkansas	Workshop	Dan Sullivan: Wildlife Conservation, Prioritization and Recovery: An Approach to Imperiled Species Conservation on State Lands.
Jonathon Miller: Historical and current biological assemblages of the Little Choctawatchee River watershed		Amy Knight: LandScope America: The Conservation Guide to America's Natural Places – A Collaborative Effort Between NatureServe and National Geographic.
12:00 pm	Lunch Break	
Natural History for Conservation	Invasive Species Outreach and EPPC Roundtable	Workshop – Monitoring & Tracking EORs
Continued	Coordinator: NAEPPC	Continued
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers	Coordinator: NAEPPC Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years.
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket Wilderness: Description, ecology, and threats Kevin Robertson: Evidence for a distinct shortleaf pine-oak-hickory community in the SE US	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to Suggestions) Karan A. Rawlins: Creating an Invasive Species	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large Managed Area. Michelle DePrenger-Levin, Jennifer Ramp Neale Methods to Evaluate the Risk of Extinction of Atragalus microcymbus, a Recent Candidate
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket Wilderness: Description, ecology, and threats Kevin Robertson: Evidence for a distinct shortleaf pine-oak-hickory community in the SE US Coastal Plain	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to Suggestions) Karan A. Rawlins: Creating an Invasive Species Community of Practice in Extension	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large Managed Area. Michelle DePrenger-Levin, Jennifer Ramp Neale Methods to Evaluate the Risk of Extinction of Atragalus microcymbus, a Recent Candidate
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket Wilderness: Description, ecology, and threats Kevin Robertson: Evidence for a distinct shortleaf pine-oak-hickory community in the SE US Coastal Plain 3:00 pm	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to Suggestions) Karan A. Rawlins: Creating an Invasive Species Community of Practice in Extension Mid-Afternoon Break	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large Managed Area. Michelle DePrenger-Levin, Jennifer Ramp Neale Methods to Evaluate the Risk of Extinction of Atragalus microcymbus, a Recent Candidate Species.
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket Wilderness: Description, ecology, and threats Kevin Robertson: Evidence for a distinct shortleaf pine-oak-hickory community in the SE US Coastal Plain 3:00 pm Species and Conservation	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to Suggestions) Karan A. Rawlins: Creating an Invasive Species Community of Practice in Extension Mid-Afternoon Break Invasive Species Outreach and EPPC Roundtable	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large Managed Area. Michelle DePrenger-Levin, Jennifer Ramp Neale Methods to Evaluate the Risk of Extinction of Atragalus microcymbus, a Recent Candidate Species. Workshop: Monitoring & Tracking EORs
Evelyn Reategui Zirena: Dam effects on fish assemblages upstream of impoundment in small southeastern Alabama Rivers Bruce Means: Steepheads, Florida's Pocket Wilderness: Description, ecology, and threats Kevin Robertson: Evidence for a distinct shortleaf pine-oak-hickory community in the SE US Coastal Plain 3:00 pm Species and Conservation Moderator: Dennis Hardin, Florida Forest Service Randy Kennedy: Lessons learned from gaining political and community support of Hawaii's first predator proof fence at Kaena Point Natural Area	Chris Evans; Raising Public Awareness Statewide Through the Illinois Invasive Species Awareness Month Cynthia Grizzle: The Florida Invasive Species Partnership - Sharing What Works (and Open to Suggestions) Karan A. Rawlins: Creating an Invasive Species Community of Practice in Extension Mid-Afternoon Break Invasive Species Outreach and EPPC Roundtable Coordinator: NAEPPC	Susanne Masi and Greg Hitzroth: Plants of Concern: Citizen Scientists in a Regional Rare Plant Monitoring Program—Results and Trends After 10 Years. Michael Keys and Chritina Legleu: Technology, Teamwork and Tortoises; An Application of Line Transect Distance Sampling to Estimate a Low-Density Gopher Tortoise Population on a Large Managed Area. Michelle DePrenger-Levin, Jennifer Ramp Neale Methods to Evaluate the Risk of Extinction of Atragalus microcymbus, a Recent Candidate Species. Workshop: Monitoring & Tracking EORs

Presentations – Listed alphabetically by author

Allen, Damian	New high-yielding direct-seeded crops are needed for the emerging biofuel and biopower
Mendel BioEnergy Seeds	industries. Mendel is developing non-invasive seeded Miscanthus varieties to meet this need.
Barney, Jacob Virginia Tech	This presentation will explore the risk of bioenergy crops becoming invasive species, and provide examples of means to quantify and mitigate those risks.
Bethke, Rachel Auburn University	The presentation will examine the current literature and where more research is needed. It will also discuss the various eradication procedures currently being trialed and comparisons will be made between the efficacy of currently invasive plant management procedures and the relationship between species ecology, potential invasivity, and ease of eradication.
Bohn, Kimberly University of Florida	This presentation will highlight findings regarding the timing of herbicide applications in conjunction with growing season burns to control the invasive Japanese climbing fern in longleaf pine and pine/hardwood forests.
Brockway, Dale G.	This presentation describes an innovative approach to selection silviculture, which can be quickly learned and easily applied to accurately obtain desired stand structures that simultaneously achieve multiple forest stewardship objectives.
Brown, Karen University of Florida	The Florida Invasive Species Partnership has successfully pulled together a wide network of agencies and organizations to collaboratively address the threat of invasive species. Come learn about our approach, the lessons learned and the many ideas borrowed.
Brusati, Elizabeth California Invasive Plant Council	Cal-IPC has developed a "risk mapping" approach to set regional priorities for invasive plant management, and has used the approach to generate recommendations for the Sierra Nevada. An online tool is in development. The approach, which is based on expert knowledge data and USGS quads, can be scaled up for mapping at the national level.
Cantlon, John Dupont	Healthy Habitats Coalition promotes conservation of the nation's natural resources and economic interests by promoting efficient management of invasive species to curtail the associated harm. Through state and federal leadership, HHC seeks legislation and appropriations that improve private, local, state, and federal land managers on-the-ground control tools.
Carol Denhof The Longleaf Alliance	A fully functioning longleaf pine ecosystem depends on not only the presence of longleaf pines but also the species rich understory. Commercial production of ecotype seed will be needed to provide adequate supply to achieve large scale restoration of this understory component across the range.
Cleckley, William Northwest Florida Water Management District	Almost 20 years of groundcover habitat restoration experience has taught this forester that looking down can be a lot more interesting and challenging than looking up! The District has been a pioneer in the restoration of wiregrass groundcover to xeric sandhill, wet prairie and wet pine flatwoods habitats in northwest Florida. This presentation will discuss both successes and failures.
Cochran, Gary Florida Fish and Wildlife Conservation Commission	This presentation will provide insight into developing optimal conservation planning boundaries through a pro-active resource-based GIS protocol and associated conservation tools.
Conrad, William Austin Water Utility	Reintroduction of fire on Urban Wildlands is typically the result of intense and complex choreography linking ecology, public involvement, public policy, and public safety.
Crall, Alycia University of Wisconsin-Madison	This presentation will discuss a framework for successful early detection and rapid response using the Great Lakes Early Detection Network as a regional example. Regional data synergy, data quality procedures, and collaboration across diverse stakeholders will be presented.
Crandall, Raelene Washington University in St. Louis	Despite past predictions, woody reseeders and resprouters co-occur in habitats that historically experienced frequent lightning fires (> twice a decade). This presentation will examine mechanisms, including fire, that influence co-occurrence of Hypericum species with different life history traits in Florida pine savannas.
Crawford, Priscilla Oklahoma Biological Survey	This presentation reviews protection efforts and monitoring of Interior Least Tern colonies on private Registry Lands in Oklahoma.
Cropper, Jr., Wendell P. University of Florida	This presentation will discuss global change projections and some potential consequences of global change for longleaf pine forests.

Cuda, James University of Florida	This presentation will provide an overview of prospects for classical biological control of cogongrass with particular emphasis on new natural enemies recently discovered in Africa.
Dean, Jennifer	New York is now in its second season of using iMapInvasives for tracking invasive species through
New York Natural Heritage Program	the contributions of professionals and volunteers. Find out about the innovations and challenges
	associated with compiling a state-wide dataset of invasive species.
DePrenger-Levin, Michelle	Over a decade of demographic data helped to add Astragalus microcymbus as a candidate
Denver Botanic Garden	species to the ESA. Now the researchers take on the daunting task of modeling the future of this rare species.
Dubious, Natalie Defenders of Wildlife.	This presentation will explain the vulnerability assessment undertaken by the Florida Fish and Wildlife Conservation Commission as part of their state wildlife action plan revision. This assessment was a hybrid approach incorporating the Climate Change Vulnerability Index (CCVI) and a spatial modeling process developed by the Massachusetts Institute of Technology.
Duever, Michael	This presentation will describe 25 years of monitoring the extent of drainage into adjacent
South Florida Water	wetlands from a large canal under 4 different management scenarios including 4 years after the canal had been filled.
Management District	
Dunwiddie, Peter W. University of Washington	Fifteen years of efforts to establish viable populations of a threatened rare plant are beginning to yield success. This experience provides guidance for others developing more efficient programs for recovering rare plants.
Eickwort, Jeffrey	Laurel wilt disease: current status of an exotic tree-killing insect and pathogen
Florida Forest Service	
Evans, Chris River to River Cooperative Weed	This presentation will review some of the planning efforts, events, and innovative public relation programs utilized during the 2011 Illinois Invasive Species Awareness Month.
Management Area	
Evans, Chris, The CHIP-N Lower Ohio River	This project used an innovative survey technique and multi-state cooperation to survey and map aquatic and riparian invasive species along the lower Ohio River Valley. These types of regional
Valley Survey Project	efforts, that cross boundaries and jurisdictions, are necessary to address invasive species at ecological scales.
Flory, S. Luke University of Florida	Invasions of the non-native grass <i>Microstegium vimineum</i> increase fire severity and inhibit tree regeneration in eastern forests.
Gallo, Travis Lady Bird Johnson Wildflower Center	This presentation will give an overview of the successful Invaders of Texas citizen science program, and discuss the model used to create a citizen science program that can be used beyond just detecting and reporting invasive species.
Gardner, Wayne University of Georgia	Megacopta cribraria (Hemiptera: Plastipidae) was discovered for the first time in the New World in October 2009 in 9 Georgia counties. It has since spread rapidly throughout Georgia, across South Carolina, and into North Carolina and Alabama. Its preferred host is kudzu where large populations build throughout the growing season and disperse to other plants including soybean.
Glick, Patty, National Wildlife Federation	This presentation will provide an overview of climate change adaptation for biodiversity conservation, including overarching principles, key steps for adaptation planning, and some examples of how adaptation may be applied in practice.
Grabowski, Janet USDA NRCS	This presentation will address the potential of using bioengineering to incorporate some easily rooted woody species on restored wetlands in Florida on sites previously mined for phosphate. Species that hold promise for this use, as well as planting and site limitations encountered during this research project will be discussed.
Greis, Anna University of Florida	This presentation will cover the effects of MAT-28 on select native and invasive plants as well as a comprehensive study on herbicides used for cogongrass control.
Hermann, Sharon	This presentation will focus on longleaf pine woodlands and examine habitat degradation caused
Auburn University	by ineffective use of prescribed fire despite efforts to mimic natural burn regimes. We suggest alternative approaches to enhance fire management and promote ecological integrity in a modern landscape subjected to climate change.

Presentations (continued)

	Test and the state of the state
Hight, Stephen USDA ARS	This presentation will discuss the tactics used to monitor and control the non-native cactus moth. These efforts have lead to eradication events of the pest on barrier islands in Mexico and the USA, and slowed the spread of this prickly pear destroying pest along the southeastern
	USA Gulf coast.
Hinkle, C. Ross University of Central Florida	This presentation will cover preliminary results from the Disney Wilderness Carbon project. The project is being conducted to evaluate the role of carbon storage and sequestration as part of the management goals along with biodiversity management and other conservation activities.
Hinz, Hariet L. CABI Europe - Switzerland	Successes we might never have had: a retrospective comparison of predicted versus realized host range of established weed biological control agents in North America
Hipes, Dan Florida Natural Areas Inventory	The foundation of an adaptive management approach to land management is measuring and evaluating the baseline ecological condition of natural communities and then implementing management actions to accomplish specific ecological objectives (i.e., to reach a desired future condition). This presentation highlights a rigorous process employed in Florida to accomplish these fundamentally important first steps of adaptive management.
Hmielowski, Tracy Louisiana State University	This presentation discusses differences in fire behavior and hardwood resprout vigor among prescribed fire treatments. Results from this study indicate prescribed fire treatments with less resprout vigor are not the same as those with more active fire behavior.
Huffman, Jean Louisiana State University	This presentation will explore the history of fire in the Central Florida pine savannas of the Avon Park Air Force Range. This is the first scar-based tree ring study of fire for peninsular Florida and one of a very few for the Southeastern coastal plain. We will also discuss the implications of the results of this study for the fire management of Southeastern pine savannas.
Huffman, Mary The Nature Conservancy	This presentation will provide an overview of current directions and gaps in scientific research into the interactions among carbon, climate and fire.
lacona, Gwen University of Tennessee	This presentation presents what considerations determine the "invadedness" of a Protected Area?
NCDA&CS, Plant Industry Division	Existing laws and regulations in many states do not provide for the regulation of potentially invasive plants in biofuel feedstock production. This presentation describes the function of noxious weed regulations and proposes stewardship actions that biofuel feedstock producers can take to minimize escapes of potentially harmful biofuel feedstock candidates.
Jackson, Jerome Florida Gulf Coast University	We will discuss shorebird diversity, abundance, and the phenology and nature of use of pine savanna and grassland habitats of the Babcock Ranch in southwest Florida, and will compare these data with historical records of this and other similar habitats in the region.
Jacono, Colette USDA APHIS PPQ	Experimental data is used to test a simple model of seed dispersal that may explain the recent invasion of Neo-tropical wetland species in Florida.
Jensen, Jens JFNew and Associates, Inc	This presentation will discuss the Boreal Forest conversion JFNew is completing to compensate for transmission line impacts. The presentation will discuss the initial site selection, design and implementation of conversion activities. The presentation will also discuss the results of the project thus far, in its fourth year.
Kennedy, Randy Hawaii Department of Land and Natural Resources	This presentation will discuss the construction of the first predator –proof fence in Hawaii and possibly the United States, and the process of gaining political and community support for this project, which is located in a high cultural, recreational and natural sensitive area.
Kent, Livia Island Press.	Whether actively engaged in adaptation or new to the concept, anyone wanting to implement an approach that incorporates adaptation into conservation planning will find the Climate Adaptation Knowledge Exchange to be an invaluable online resource.
Keys, Michael U.S. Fish and Wildlife Service	Land managers have frequently failed to meet public expectations and legislative obligations to manage imperiled gopher tortoise populations through best science methods. The crucial missing element has typically been the most basic to wildlife management – employing objective, robust population estimate techniques.

Knight, Amy Florida Natural Areas Inventory	LandScope America is a multi-media, web-based resource that informs and inspires land conservation. An especially notable component is a sophisticated map viewer with innovative mapping and reporting tools. This presentation will highlight the content and functionality of LandScope America using the Florida example.
Kreye, Melissa M. University of Florida	This presentation will discuss the mission of the CFEOR cooperative and how collaboration among CFEOR members provides creative solutions for sponsoring high quality research and outreach in land management issues.
Kush, John Auburn University	This presentation will focus on the ecology and management of longleaf pine, especially as it relates to restoration. Real world examples will be presented to make the case for longleaf pine and a changing climate.
Larson, Vickie Ecospatial Analysts, Inc.	This presentation provides GIS models of natural community impacts related to sea level rise and potential changes in species distribution for three time periods. A regional conservation design was developed to reduce the potential effects of climate change in the coastal region.
Lee, Philip Parks Canada Agency	This presentation will retrospectively examine the impact of invasive beach grasses on the flora and succession of a coastal dune complex. It also outlines the current restoration efforts through the removal of <i>Ammophila spp</i> , and Spruce islands and recovery of native vegetation including rare and at risk species.
MacDonald, Greg University of Florida	This presentation will discuss restoration strategies following cogongrass removal utilizing native plant establishment and supplemental chemical control.
Masi, Susanne Chicago Botanic Garden	This presentation discusses Plants of Concern, a long-term monitoring program, has trained citizen scientists to use a standardized protocol to monitor rare plants throughout the Chicago region since 2001. The presentation describes the program's scope, select results from 10 years of data, including population trends and adaptive management responses to reported threats, and the scientific value of volunteer contributions.
Menges, Eric Archbold Biological Station	This presentation will review how alternative management approaches (such as various types of mechanical treatments and different fire regimes) affect plants of Florida scrub, particularly rare species. I recommend ways that variation in management can be used to accomplish multiple goals and encourage adaptive responses.
Milano, Gary R. Miami-Dad Natural Resources Management	This presentation will provide a project summary of a 75-acre restoration effort on a south-east Florida barrier island (Virginia Key). A project overview, from conception to success monitoring, will be provided together with discussion of the cost-effective strategies and techniques used.
Miller, Jonathan M. Troy University	This presentation will show the elevated levels of nutrients found in a small southeastern Alabama watershed compared to U.S. EPA nutrient criteria. In addition, the need for not only enforcing nutrient criteria but evaluating water quality prior to impounding areas for drinking water will be illustrated.
Millett, Cheryl The Nature Conservancy	This presentation will introduce Python Patrol, a model of Early Detection and Rapid Response addressing the range expansion of Burmese pythons out of the Florida Everglades. This program, which originated in the Florida Keys, is now being implemented on the mainland of Florida, addressing key components, partners and progress.
Millett, Cheryl The Nature Conservancy	Our test of a modified New Zealand risk assessment system for freshwater plant species had 97% accuracy in identifying both major and non-invaders in the U.S.
Moorhead, Dave University of Georgia	This presentation will cover a variety of interactions involving applying prescribed fire and the control of invasive plant species.
Oetting, Jon, Florida Natural Areas Inventory.	This presentation will discuss a project underway that will look at the future impacts of sea level rise on key species recognized as conservation priorities by the Florida Natural Areas Inventory.
Parsons, Doug Florida Fish and Wildlife Conservation Commission.	This presentation will provide an overview of the National Fish, Wildlife, and Plants Climate Adaptation Strategy, with an emphasis on the coastal management section.

Presentations (continued)

Patrick, Lee Invasive Plant Control, Inc	Web Based Tools For Invasive Species Management
Pernas, Tony National Park Service	The Trouble with Tegus
Petrick, Carl U.S. Forest Service	The National Forests in Florida has developed, and is using, Ecological Condition Models to display the current condition of the land relative to the desired future condition at the landscape scale. Management prioritization models have and are being developed to more effectively and efficiently integrated management programs to achieve a greater effect.
Phillips, Aubrey L. Natural Resources, Sarasota County Gov.	Adaptive management has the potential to provide substantial benefits for public land management but there are significant impediments to implementing such a transition. In this presentation, Sarasota County Government will share its experience navigating obstacles while initiating an adaptive management approach to land management planning at the local level.
Price, Frank Florida State University	The Florida Natural Areas Inventory (FNAI) has recently completed the initial data compilation and survey effort for a project to track invasive plant occurrences on all of the state's 1,700+ public conservation lands. This presentation will focus on summary and analysis of the data collected, discuss the management implications of findings and provide an overview of plans to use the iMapInvasives online invasive species mapping tool to keep the database up to date.
Printiss, David	How to go from bare mineral soil to functioning sandhill in 40 months.
The Nature Conservancy Quinn, Lauren University of Illinois	Miscanthus sinensis, an invasive ornamental grass, is closely related to other Miscanthus species used for bioenergy. Using M. sinensis as a proxy, we show that fertile varieties of Miscanthus may spread and become invasive if produced on large scales for bioenergy.
Ramp Neale, Jennifer Denver Botanic Gardens	The researchers tested the usefulness of ecological niche modeling in predicting microhabitat requirements of a rare buckwheat.
Rawlins, Karan The University of Georgia	This presentation will raise awareness and participation in a nationwide effort to make the most reliable information on invasive species readily available to the general public, and in particular to important volunteer groups such as Master Gardeners.
Roberts, Richard	This presentation will illustrate the complexity of managing non-native plants in the restoration of freshwater flows to a southeast Florida riparian floodplain forest.
Robertson, Kevin Tall Timbers Research Station	We estimated carbon storage in research plots prescribed burned at different fire return intervals. Although fire-exclusion resulted in the greatest amount of total carbon storage, frequent fire (1-3 year interval) does not reduce soil carbon and provides a stable, ecologically-sustainable carbon sink.
Rodriguez, Emily. University of Florida	Two experiments were conducted to provide knowledge that will improve chances of success when restoring wiregrass (<i>Aristida stricta</i>) through direct seeding.
Ryon, Michael Oak Ridge National Laboratory	A study of an experimental approach to remediation of PCB-contaminated habitat will be discussed that offers enhancement of natural resources on the site.
Samuelson, Lisa Auburn University	Information on below-ground carbon fluxes and carbon storage in longleaf pine ecosystems will be presented and the importance of soil respiration in determining forest carbon balance will be discussed.
Schmitz, Don Florida Fish and Wildlife Conservation Commission	This presentation will describe the establishment of the North American Invasive Species Network and how it will enhance the coordination of invasive species management in a multi-jurisdictional environment.
Schwarzlaender, Mark University of Idaho	Evaluating regional impact of weed biological control using the Standardized Impact Monitoring Protocol (SIMP)
Smith, Latimore The Nature Conservancy	This presentation will describe a possibly unique effort in the southeast to restore wetland longleaf pine savanna groundcover in a long-farmed agricultural field completely lacking any native savanna plant species prior to project implementation. This work has greatly expanded our vision of restoration potential on highly degraded landscapes.

Stys, Beth	This presentation will provide an overview of the climate change planning efforts at the Florida
Florida Fish and Wildlife	Fish and Wildlife Conservation Commission. It will also cover the evolution of the issue at the
Conservation Commission.	agency with an emphasis on adaptation planning.
Sullivan, Dan	This presentation will inform the audience how the FWC identifies and prioritizes focal
Florida Fish and Wildlife	species management opportunities to create a wildlife management strategy for our Wildlife
Conservation Commission	Management Areas. The presentation also will provide examples of how FWC staff have applied
	the management recommendations prescribed in these
Calling I David In	wildlife strategies.
Sullivan, J. Daniel, Jr. Florida Fish and Wildlife	This presentation will inform the audience how the FWC identifies and prioritizes focal species management opportunities to create a wildlife management strategy for our Wildlife Management
Conservation Commission	Areas. The presentation also will provide examples of how FWC staff have applied the
Conservation Commission	management recommendations prescribed in these wildlife strategies.
Sung, Shi-Jean Susana	This presentation will illustrate the importance and the improvements of root system architecture
U.S. Forest Service	in container-grown longleaf pine seedlings.
Swanson, Kathleen	This presentation provides an overview of FFWCC's approach to adaptive management with an
Florida Fish and Wildlife	emphasis on measurement and evaluation of ecological change over time.
Conservation Commission	
Savareno, T.J.	Native plant seeds for diverse and successful ecological restoration projects remain limited and
Pee Dee Research and Education	often expensive, especially when trying to find appropriate local ecotypes. This presentation
Center, Clemson University	discusses the formation of a multi-institutional group, initially focused on the Southeastern Plains
	and Middle Atlantic Coastal Plain ecoregions, with the goals of increasing native plant seed
	diversity and availability.
Trianosky, Paul	The American Forest Foundation's Southern Pilot Project is building on the momentum of longleaf
American Forest Foundation	conservation interests to accelerate and deepen landowner engagement in management of family-
	owned forests. This program will review progress to date, including the use of creative approaches for targeting landowners and maximizing conservation impact on the landscape.
Wallace, Rebekah	This presentation will cover efforts to recruit data into a national database, update existing
University of Georgia	reporting and collection technology, and developing regional early detection networks.
Westbrooks, Randy	Blueprint for Development of National Early Detection and Rapid Response Systems for Invasive
USGS	Plants in the United States and Canada
Wilcox, William H.	Are agricultural revenue based public-private partnerships in your land management future? What
Edison State College	works, what doesn't work, and what changes should be made.
Williges, Kent	This presentation will highlight the restoration component of FFWCC's adaptive management
Florida Fish and Wildlife	approach to land management.
Conservation Commission	
Zipperer, Wayne	Future longleaf pine restoration efforts could be affected by human population growth and
U.S. Forest Service	bio-fuel production.



Experience Virginia from the western karst lands to the Eastern Shore.







Keeping Natural Areas Relevant and Resilient



39th Annual Natural Areas Conference Norfolk, Virginia I Oct. 9-12, 2012