Conference Program & Schedule of Activities



Natural Areas Revival In Music City TUNING INTO A CHANGING CLIMATE AND BIOLOGICAL INVASION



DEPARTMENT OF ENVIRONMENT & CONSERVATION





Welcome to Nashville

he Tennessee Department of Environment and Conservation is pleased to be co - hosting the 35th annual Natural Areas Conference in downtown Nashville. We are proud to be partnering with the Natural Areas Association (NAA) and the National Association of Exotic Pest Plant Councils (NAEPPC) in what we hope will be one of the highest quality conference events you might experience.

Our conference theme is Natural Areas Revival in Music City: Tuning into a Changing Climate and Biological Invasion. What will these two threats mean in how we manage for the future? We are hopeful that this meeting of the minds will provide hope and energize us in addressing these colossal challenges.

For that purpose, we have invited many of the foremost experts in their field to present in the plenary session, symposia, and workshops. There will be posters, contributing papers, and also field trips to some of Middle Tennessee's most unique natural areas. We are providing training, roundtables, and forums throughout the conference so that ideas may freely flow.

Please make the most of these opportunities and have fun enjoying the socials, our banquet at the historic Ryman Auditorium, and our southern hospitality while in Music City! And a special thank you to the many generous donors, auction item contributors, presenters, and members of the various conference committees who have made the 2008 Natural Areas Conference possible.

> Brian Bowen Conference Chair

2008 Natural Areas Conference Donors

Underwriters (\$5,000 and above) Florida Department of Environmental Protection Tennessee Department of Environment and Conservation US Bureau of Land Management USDA - Forest Service USDA- APHIS (Animal Plant and Health Inspection Service) US Geological Survey Union of Concerned Scientists Syngenta, Inc

Sponsors (\$1,000 – \$4,999) National Park Service - Exotic Plant Management Team Center For Invasive Species & Ecosystem Health at the University of Georgia Bridgestone Firestone North America Tire, LLC Purity Dairy **Biohabits** US Geological Survey NBII - SAIN DowAgroScience **JFNew** Wolf River Conservancy Truax Company, Inc. Tennessee Valley Authority **Island Press** Shelby Park Farms Conservancy Center for Invasive Plant Management The Nature Conservancy of Tennessee McQuiddy Printing Company **Cumberland Trail Conference** NatureServe Tennessee Parks and Greenways Foundation

California Invasive Plant Council Mid Atlantic Exotic Pest Plant Council Florida Exotic Pest Plant Council Southeast Exotic Pest Plant Council

Supporters (\$500 - \$999)

Tennessee Wildlife Resources Agency Tennessee Wildlife Federation Friends of South Cumberland Recreation Area Tennessee Native Plant Society Sierra Club, Tennessee Chapter Georgia Exotic Pest Plant Council North Carolina Exotic Pest Plant Council Tennessee Exotic Pest Plant Council Kentucky Exotic Pest Plant Council South Carolina Exotic Pest Plant Council Alabama Invasive Plant Council The Conservation Fund Tennessee Ornithological Society

Partners (\$100 - \$499)

Friends of Short Springs Swan Conservation Trust Southern Appalachian Highlands Conservancy Friends of the Warner Parks Tennessee Citizens for Wilderness Planning Tennessee Aquarium Memphis Garden Club Invasive Plant Association of Wisconsin Dropseed Nursery North Chickamauga Creek Conservancy Land Trust for Tennessee Nashville Natives Midwest Invasive Plant Network Auction Item Donors (\$300 and above) Mike Lee Kim Barrick

In – Kind Support

Tennessee Department of Environment and Conservation Bureau of State Parks Division of Natural Areas National Park Service - Stones River National Battlefield McQuiddy Printing Company Center For Invasive Species & Ecosystem Health at the University of Georgia Arnold Engineering and Development Center Metropolitan Board of Parks and Recreation, Nashville – Davidson County National Invasive Species Council Mississippi State University GeoResources Institute National Park Service - Florida and Caribbean Exotic Plant Management Team Tennessee Wildlife Resources Agency Tennessee Department of Agriculture Tennessee Division of Forestry **Regions Bank**

General Information

Questions?

Stop in at the registration table, or look for attendees wearing orange VOLUNTEER ribbons. Urgent messages for attendees will be posted at the registration table.

Name badges

Please wear your name badge to all conference sponsored events. It is your ticket to access symposia, sessions, breaks, socials, and the banquet. At the conclusion of the conference, please recycle your plastic name badge holder in the box at the registration table.

Speaker preparation room

Two laptops are available in the Bellevue Room during conference hours.

Meals & dining out

Your full conference registration fee provides continental breakfast on Wednesday and Friday, socials on Tuesday and Wednesday evenings, and a field trip box lunch and the annual banquet on Thursday. All other meals are on your own. Downtown Nashville has many wonderful restaurants located within walking distance of the Doubletree. Refer to the restaurant list and downtown maps in your conference folder for a wide selection of dining establishments.

Auction

An eclectic array of silent and live auction items will be displayed in Salon C & D for your bidding pleasure beginning

Tuesday evening. Bidding will close on silent auction items during Thursday evening's banquet, just prior to the live 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. If you've brought items to donate to the auction, please drop them off at the registration table. Items must be dropped off by 1:30 p.m. on Wednesday.

Field Trips

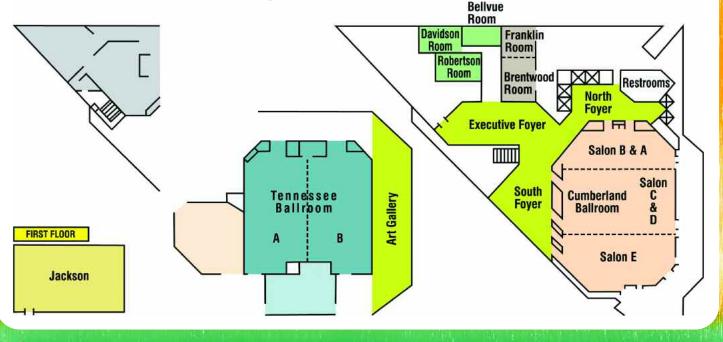
Look for a ticket in your name tag pouch showing your preregistered field trip. If you have any questions regarding your scheduled trip, visit the registration table from 8:00 a.m. on Tuesday through 1:30 p.m. on Wednesday. Changing field trips is discouraged, but any field trip changes must be made by 1:30 p.m. on Wednesday.

Conference T-shirts

Stop in at the Natural Areas Association booth to pick up your official 35th Annual Natural Areas Conference T-shirt, before they sell out. These 100% organic cotton shirts, printed with water-based ink and fair trade practices, are longlasting. They make a great souvenir. Get yours now!

The conference T-shirts are 100% sustainably produced shirt, and a higher quality product that will outlive normal screenprinted products. You get a terrific T- shirt that also reflects our social and environmental values.

DoubleTree Meeting Facilities



General Information (continued)

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Things To Do In Nashville

There are many music and entertainment venues in the downtown area. There are also numerous other venues near downtown. We recommend that you pick up a free "Scene" weekly which provides a listing of music and entertainment activities. Also, a listing of venues and entertainment in Nashville is provided on the conference website. The hotel lobby and foyer area provide wi – fi access!

A Note About Student Awards

We want to thank those students who entered the student awards contest. The winners of this contest will be recognized in the next issue of the Natural Areas News and posted on the NAA website.

Additional Hotel Meeting Space

The hotel provides for informal meeting space in the coffee shop and bar both of which also provide outdoor seating. We also encourage you to visit the Art Gallery where you can informally meet (seating provided) and mingle with conference sponsors.

Directions

War Memorial Auditorium - From the Doubletree Hotel, follow Deaderick Street (street on the north side of the hotel) 2 blocks west to Legislative Plaza. Continue up the stairs through the columns, and the War Memorial Auditorium is to your left.

Regions Financial Center Auditorium – From the Doubletree Hotel, walk east across 4th Avenue and enter the Regions Bank main entrance on Deaderick Street. Take the elevator to the 5th floor auditorium.

Ryman Auditorium – From the Doubletree Hotel, go south on 4th Avenue 2 blocks, cross Commerce Street, and the Ryman is the second building on your right.



Augustin Gattinger, published the first and only Flora of Tennessee in 1900. Many plants today bear his name as he described many plants new to science. His site locations of rare species also led to the protection of many rare species in state natural areas.

Roan Mountain, in Carter County, is a hot spot for rare and endemic species. It was visited by Asa Grey, ----, in the 19th. Grey, Chapman, and and other 19th century frequently corresponded with Gattinger regarding the state's flora.



Conference Schedule Overview

Monday, October 13, 2008

7:00 p.m. – 9:00 p.m. Registration (South Foyer)

Tuesday, October 14, 2008

7:30 a.m.	1. 	5:00 p.m.	Registration (South Foyer)	
8:30 a.m.	-	11:30 a.m.	Roundtables and Workshops	
10:00 a.m.	1	7:30 p.m.	Exhibits (Foyers & Art Gallery)	
5:30 p.m.	-	7:30 p.m.	Silent Auction (Salons C & D)	
5:30 p.m.	-	7:30 p.m.	Poster Presentations (Salons C & D)	
1:00 p.m.	. <u></u>	1:20 p.m.	Welcome Addresses (War Memorial Auditorium)	
1:20p.m.	-	5:30 p.m.	Plenary Session (War Memorial Auditorium)	
5:30 p.m.	-	7:30 p.m.	Opening Reception (Doubletree Hotel)	

Wednesday, October 15, 2008

7:30 a.m.	_	5:00 p.m.	Registration (South Foyer)
7:00 a.m.	-	8:30 a.m.	Continental Breakfast
8:30 a.m.	. - ni	10:00 a.m.	Early Morning Sessions
9:00 a.m.	_	3:00 p.m.	Land Trust Alliance Seminar "Conservation Easement: Keys to Permanence"
			(Regions Financial Center Auditorium, 5th Fl Regions Bank)
10:00 a.m.	-	10:30 a.m.	Mid Morning Break
10:30 a.m.	-	12:00 p.m.	Late Morning Sessions
12:00 p.m.	-	1:30 p.m.	Lunch (on your own)
			NAA Annual Membership Luncheon Meeting (lunch provided)
1:30 p.m.	-	3:00 p.m.	Early Afternoon Sessions
3:00 p.m.	_	3:30 p.m.	Mid Afternoon Break
3:00 p.m.	—	5:00 p.m.	Tennessee Land Trust Network Meeting
			(Regions Financial Center Auditorium, 5th Fl Regions Bank)
3:30 p.m.	-	5:00 p.m.	Late Afternoon Sessions
5:00 p.m.	-	7:00 p.m.	Poster Session & Social (Doubletree Hotel)

Thursday, October 16, 2008

6:30 a.m.	-	9:30 a.m.	Registration
6:30 a.m.	-	9:30 a.m.	Pick up box lunches
7:00 a.m.	-	9:30 a.m.	Buses depart from Doubletree Hotel for field trips
6:30 p.m.	-	11:00 p.m.	Banquet at the historic Ryman Auditorium

Friday, October 17, 2008

7:30 a.m.	-	9:30 a.m.	Registration
8:30 a.m.		10:00 a.m.	Early Morning Sessions
10:00 a.m.	-	10:30 a.m.	Mid Morning Break
10:30 a.m.	-	12:00 p.m.	Late Morning Sessions
12:00 p.m.	-	1:30 p.m.	Lunch (on your own)
			NAEPPC Luncheon Meeting (lunch provided)
			NAA Focus Group Discussions Lunch (bring your lunch)
1:30 p.m.		3:00 p.m.	Early Afternoon Sessions
3:00 p.m.	-	3:30 p.m.	Mid Afternoon Break
3:30 p.m.	-	5:00 p.m.	Late Afternoon Sessions
5:00 p.m.			Conference adjourns

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Schedule of Special Events

Tuesday, Oct 14

Land Management for Land Trusts Workshop 8:30 a.m. – 11:30 a.m. TENNESSEE A

This workshop is especially intended for land trust staff interested in learning about developing and implementing effective land management strategies (as identified in Standard 12 of the Land Trust Alliance's Standards and Practices). But anyone responsible for stewardship of natural areas should also find it useful. Specific topics to be covered include communicating the importance of land management to a board of directors (or other staff), building a stewardship program from scratch, management planning, capacity building, tools of the trade, invasive species control, and more. There will also be plenty of time for discussion to address specific challenges and needs of the participants. **Facilitators:** David Borneman, NAA Board Member and Natural Area Preservation Manager, City of Ann Arbor and Nate Fuller, Conservation and Stewardship Director,

Southwest Michigan Land Conservancy

Weed Risk Assessment

8:30 a.m. - 11:30 a.m. SALON E

Objective ranking of established non-native plant species according to their negative impacts on native biodiversity is a challenge faced by many land management agencies. In this workshop, participants will be introduced to NatureServe's Invasive Species Assessment Protocol, a series of 20 questions that aims to systematically evaluate and synthesize various facets of a species' impact. The protocol may be used for any relatively large geographic region, such as a state, ecoregion, or nation; many organizations have adapted NatureServe's protocol for use in their state or region. After an introduction to the protocol questions – which address Ecological Impact, Current Distribution/Abundance, Trend in Distribution/Abundance, and Management Difficulty - participants will practice applying the protocol to one or more invasive plant species. Information on which to base evaluations will be provided (focusing on species invasive in the southeast), but participants may also bring their own information resources to evaluate species of their choosing. Facilitator: Kelly Gravuer, Botanical Research Associate, **NatureServe**

NatureServe's LandScope America

8:30 a.m. - 11:30 a.m. TENNESSEE B

LandScope America – a collaborative project of NatureServe and the National Geographic Society – is a new online resource for the land-protection community and the public. Planned for release in late 2008, LandScope America will bring together maps, data, photos and stories about the land and present them in dynamic formats. Get a sneak preview of this valuable new website by viewing a live demo of its interactive mapping tools. You'll also learn how you can use the website as a resource to strategically plan and promote your conservation efforts to a wider audience, and become a partner in the effort by contributing content about your own projects. **Facilitator:** Heather Rorer, Partnership and Outreach Coordinator, NatureServe

State Natural Area Programs Roundtable 8:30 a.m. – 11:30 a.m. SALON A/B

The State Natural Areas Roundtable brings together state natural area administrators who work in an array of urban, rural, and remote settings to conserve and restore biodiversity. Recognizing that each state's program is unique, roundtable participants see the benefit of sharing successes, learning to survive challenging situations, and bringing new suggestions to colleagues back home.

Each fall, during the Natural Areas Association's Annual Conference, the roundtable convenes to hold discussions relevant to state natural area programs. Every state that participates in the roundtable is given the opportunity to submit a Status Report each year. The Status Reports are presented in a "Roll Call of the States" format. The Roundtable provides an open and active forum for information exchange and updates, including guidance on general planning and management issues. **Facilitator:** Karen Smith, NAA Board Member and Director, Arkansas Natural Heritage Commission

Federal Natural Area Programs Roundtable 8:30 a.m. – 11:30 a.m.

This session provides federal natural area program managers who are attending the conference the opportunity for discussion and networking. Potential topics include reviews of program status in various agencies, ideas for sustaining or revitalizing federal natural area programs, and strategies for funding and collaborative projects. In addition, opportunities for strengthening partnerships with the Natural Areas Association, state natural area programs, and Natural Heritage Programs may be discussed. **Facilitators:** Steve Shelly, NAA Board Member and Regional Botanist/Research Natural Areas Coordinator U.S. Forest Service and Jeff Krause, Wildlife Biologist, U.S. Army Corps of Engineers

TUESDA

Plenary Session – War Memorial Auditorium

Welcome addresses 1:00 p.m. Kim Herman, President, Natural Areas Association, and Brian Bowen, Conference Chair, Tennessee Department of Environment and Conservation

Plenary Addresses

1:20 p.m. – 1:55 p.m. Jim Fyke, Commissioner of Department of Environment and Conservation, **Conserving Tennessee's Natural Heritage**

1:55 p.m. – 2:30 p.m. Ed Clebsch, University of Tennessee, The Natural History of Tennessee

2:30 p.m. – 3:00 Break

3:00 p.m. – 3:10 p.m. Tony Pernas, National Association of Exotic Pest Plant Council, President

3:10 p.m. -3:50 p.m.

Richard N. Mack, School of Biological Sciences, Washington State University, Pullman, WA. Predicting Biological Invasions Under Global Climatic Change: Complexity²

3:50 p.m. - 4:30 p.m.

Daniel Simberloff, Nancy Gore Hunger Professor of Environmental Studies at the University of Tennessee. Biofuel Feedstocks: Are Invasion Biologists Just Chicken Littles

4:30 p.m. - 5:20

Larry J. Schweiger, President and CEO, National Wildlife Federation. Confronting The Climate Crisis: Why We Need To Reinvent Natural Resources Conservation To Save The Places We Care About

5:30 p.m.

Opening Reception: Doubletree Hotel



Fall Creek Falls is a 285 foot waterfall in Rhea County contained within the 20,000 acre Fall Creek Falls State Park and Natural Area. The rugged gorges here are where Lucy Braun described the Mixed Mesophytc Forest in her book Decidous Forests of the Eastern US.



The glades and barrens are some of Tennessee's most unique ecosystems. Botanist's such Dr Ha DeSelm at UT and Dr Elise Quarterman at Vanderbilt University were at the forefront of discovering grassland natural areas. Dr. Quarterman was pioneer in cedar glade research in the 1950's.



May Prairie was discovered on July 4th by Dr. A.J. Sharp, Dr. Ed Clebsch, and Ed Clebsch jr, of our plenary speaker, who was only 13 at the time. University of TN botanists where on a mission to rebuild the state herbarium collection destroyed by fire in the 1927. Gattinger's flora was important because many of speciemens destroyed where Gattingers.

Schedule of Special Events (continued)

Wednesday, October 15

Land Trust Alliance Seminar: "Conservation Easements: Keys To Permanence"

9:00 a.m. – 3:00 p.m. REGIONS BANK BUILDING -FINANCIAL CENTER AUDITORIUM

This seminar will review how to assure permanency in conservation easement agreements with private landowners, and will review best practices in negotiating and drafting easements, baseline documentation, stewardship and regular monitoring, maintaining positive landowner relationships, handling violations, dealing with future amendments, and long-term enforcement and defense. Contents of the workshop will be drawn from several units of the Land Trust Alliance's new Standards and Practices Curriculum. The presenters will provide short synopses of each topic, followed by open discussion aimed to address "real life" issues of concerns to the participants. Instructors: the workshop instructors are Leslie Ratley-Beach, the Land Trust Alliance national conservation defense program director (and former legal counsel for the Vermont Land Trust); assisted by Laurel Florio, a Land Trust Alliance trainer and counselor (and former attorney for Ducks Unlimited).

The Land Trust Alliance is largely financing this workshop with grants from the Lyndhurst, Merck, and Charles Stewart Mott foundations. A noon hour break will be allowed for workshop attendees to eat lunch on their own at the nearby Arcade building.

Urban Natural Areas: Issues for Urban Natural Areas Managers

10:30 a.m. - 12:00 p.m. SALON A/B

The focus of this workshop will be on finding and sharing realistic solutions to real world problems faced by natural areas managers, particularly those that manage urban natural areas. This session will be structured around audience participation. A small panel of speakers will introduce the topics that will form the focus of the workshop. The audience will then be challenged to discuss and offer potential solutions for a number of realistic scenarios involving the chosen issues (see issues below). Audience members will work in small groups on one or more scenarios and then share their "solutions" with the entire group. The panelists and the rest of the audience will be encouraged to discuss and refine the findings. **Facilitator:** Pete Colverson, NAA Board Member and Communication Specialist, Pandion Systems, Inc.

Natural Areas Association Annual Membership Luncheon Meeting

12:00 p.m. -1:30 p.m. The Doubletree Hotel SALON E A World Café With NAA - Come have lunch with us. Engage in an intelligent, interactive session about questions that matter. Help shape the future of your NAA! All NAA Members Invited!

Cooperative Weed Management Areas: Using Cooperative Weed Management Areas (CWMAs) to Improve Invasive Plant Management

1:30 p.m. - 3:00 p.m. TENNESSEE A

This session will address how CWMAs are used to improve invasive plant management efforts by bringing together landowners and land managers from both public and private lands to work collaboratively on prevention, control, and outreach. An introductory talk will introduce the concept of CWMAs and the wide variety of projects that they have implemented across the country. The remainder of the session will be a panel discussion including participants from CWMAs around the country who will provide insights into how they established their CWMAs and what they have accomplished. **Facilitators:** Kate Howe, Midwest Invasive Plant Network and Janet Clark, Center for Invasive Plant Management

Tennessee Land Trusts Network Meeting 3:00 p.m. – 5:00 p.m. REGIONS BANK BUILDING -FINANCIAL CENTER AUDITORIUM

The coalition of land conservancies operating in Tennessee will hold its business meeting following conclusion of the Land Trust Alliance Seminar.

Exotics Prevention – How to Build an Effective Partnership 3:30 p.m. – 5:00 p.m. SALON E

This workshop will follow several symposia that will discuss current trends in invasive risk assessments, prevention of new invasions or spread of existing invasions to natural areas through anthropogenic pathways, and examples of how the St. Louis Declaration is working around the country. The goal of the workshop is to produce a cookbook on how to encourage local horticulture businesses, government entities, or other group that intentionally introduces invasive plants, to adopt voluntary measures that remove existing invasive plants and promote non-invasive alternatives. **Facilitators:** Sarah Reichard, University of Washington and Valerie Vartanian, Global Invasive Species Team, The Nature Conservancy

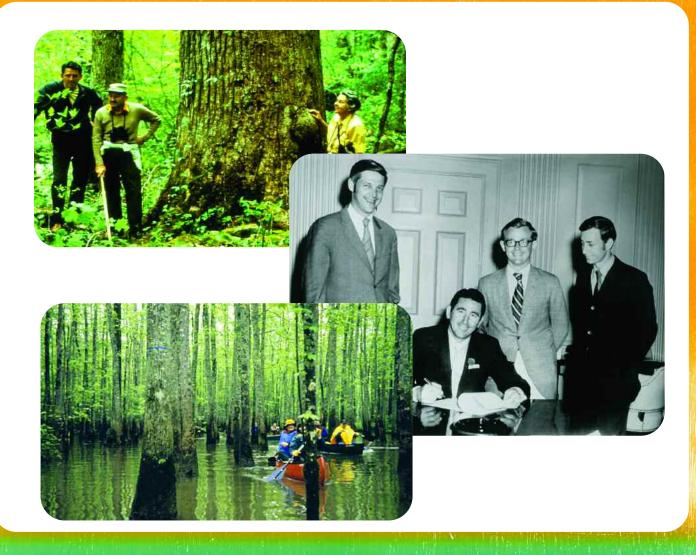
Forest Health – Firewood

3:30 p.m. - 5:00 p.m. JACKSON

Firewood is increasingly recognized as an important vector in the establishment of new outbreaks of forest pests far from previously existing sites. While the most prominent example is the emerald ash borer, numerous other insects and pathogens can also be moved via this pathway. Firewood is a difficult vector to manage as it is moved by a wide variety of people for both commercial sale and personal use. Natural area sites open to public use, especially camping, appear to be particularly vulnerable. What can natural area managers do to protect sites under their responsibility? What approaches have national and state land-managing agencies taken? What issues entered into these decisions? How important is it that everyone's actions be coordinated – and what is the role of "leaders"? Finally, can managers learn from or apply lessons to vectors of other types of invaders, such as use and disposal of bait; or cleaning fishing gear, boats, tires, and boots? **Facilitator:** Faith Campbell, The Nature Conservancy

Poster Session & Reception

5:00 p.m. – 7: p.m. (DOUBLETREE FOYERS & SALON A/B) Immediately after the last session join your colleagues to meet the poster authors while enjoying appetizers and musical entertainment. Cash bar available.



Schedule of Special Events (continued)

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Thursday, Oct 16

Field Trip Workshop Opportunities:

Field Trip 21 (FT21): Invasive Pest Plant Identification Workshop: Identify the Threats to Our Native Landscape 8:00 a.m. and return by 1:00 p.m. (4 hours) Shelby Bottoms Greenway and Nature Park is an 810-acre natural area with a greenway located on the western shore of the Cumberland River and is only 3 miles from downtown Nashville. The five miles of paved trails and five miles of primitive trails offer opportunities to experience bottomland hardwood forests, upland forests, wetland meadows, and ponds in this mostly alluvial floodplain. Although boasting lofty trees, fall flowering meadows, and birding, an experienced outdoor enthusiast will discover invasive pest plants threatening the natural integrity of the nature park. The visit to Shelby Bottoms will concentrate on invasive pest plant identification, management and techniques, results of summer treatments on various invasive plants, and of course the native splendor of the park. Leaders: Lee Patrick, VP, Restoration Ecologist, Invasive Plant Control, Inc.,

Field Trip 22 (FT22): Native Grass ID Workshop

7:00 a.m. and return by 5:00 p.m.

For this workshop, we will visit two of the highest-quality grasslands in Tennessee to teach field-recognition of Tennessee's major autumn graminoid genera and species. The first site is Flatrock Cedar Glades and Barrens State Natural Area (FCGBSNA), a 846-acre preserve located in Rutherford Co., Tennessee. This site contains exceptional examples of limestone cedar glades, xeric limestone prairies, calcareous wet meadows, and associated rocky calcareous forests and is home to many threatened and endangered plants, several of which are disjunct from the Ozarks or Great Plains. The second site is May Prairie, a 250-acre preserve located in Coffee Co., Tennessee. May Prairie is contains one of the best remaining examples of wet prairie in the state as well as some outstanding examples of acidic flatwoods. May Prairie also contains a high number of species that are significantly disjunct from the Coastal Plain as well as many species which are considered threatened or endangered in Tennessee. Participants should expect to see and become familiar with the following graminoid genera: *Agrostis, *Andropogon, *Aristida, Bouteloua, Bulbostylis, Calamagrostis, *Carex, *Chasmanthium, Cinna, *Cyperus, Danthonia, *Dichanthelium, Digitaria, Dulichium, *Echinochloa, *Eleocharis, *Elymus, *Eragrostis, Festuca, Fimbristylis, Gymnopogon, *Juncus, Kyllinga, *Leersia, Microstegium, *Muhlenbergia, *Panicum, *Paspalum, *Rhynchospora, Saccharum, Schizachyrium, Schoenoplectus, *Scirpus, Scleria, Setaria, Sorghastrum, *Sporobolus, Tridens, Typha, and *Xyris (* means that multiple species will be observed for that genus). Leader: Dwayne Estes, Ph.D., Plant Taxonomist, Austin Peay State University, Clarksville, TN

Field Trip 23 (FT23): GPS Training w/ SE-EPPC-EDDMapS Overview Workshop

8:00 a.m. completed by 3:00 p.m.

A well-designed geographic information system consists of five key components: hardware, software, data, methods, and personnel. Data collection and the management of that data is one of the most important, time-consuming, and perhaps costly components of a geographic information system.

The GPS: The global positioning system is a growing trend that can be seen in a variety of areas. It is an incredibly useful tool when it comes to the collection of spatial data. Prior to the use of GPS, field technicians needed surveying equipment to determine their locations when conducting field surveys. This took a great deal of time and required a degree of knowledge in surveying methods that most technicians did not have. With this technology, field crews can conduct surveys and use the information collected by the GPS receiver to determine where they collected their samples. This information is vital to identifying any potential spatial patterns that may exist.

In this workshop, we will use the GPS to collect data and enter it into the EDDMapS. Early Detection and Distribution Mapping System, or EDDMapS, was developed to provide a more accurate picture of the distribution of invasive species. EDDMapS allows land managers, agencies and others to set priorities for early detection and rapid response (EDRR), as well as formulate overall invasive plant management action plans. **Leaders:** Bill Avant, TN Department of Environment and Conservation and Chuck Bargeron, Center for Invasive Species and Ecosystem Health at the University of Georgia

Field Trip 24 (FT24): Invasive Pest Plant Site Management Planning Workshop

7:50 a.m. to 4:45 p.m. Classroom time starts at 8:00. SALON E Vehicles depart at 8:30.

Description: Uncover the principles involved in a site evaluation of a unique 3,000-acre municipal natural area. We will begin the day reviewing the steps involved in developing an invasive species management plan in Nashville's Warner Parks. Riparian, prairie and hardwood forest scenarios will be toured to provide examples of the invasive species problems relevant to this park. Attendees will learn the basic steps involved in defining the scope of the project, choosing the correct IPM strategies for control and address the restoration aspects of the project with a visit to a local native plant nursery. Instructors will discuss the tools relevant for controlling invasives on this site with regards to cultural and ecological concerns. **Leaders:** Steven Manning, President, Invasive Plant Control, Inc.

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Friday, October 17

Early Detection and Rapid Response: Invasive Species Mapping – Trends and Data Sharing. 10:30 a.m. – 12:00 p.m. JACKSON

This workshop/panel discussion will discuss the different mapping projects across the country, goals, successes and trends of projects, and possibilities of data sharing. Each project in attendance will provide a short overview of their project including the region it covers, who is entering data into the system, what data elements are being collected and what their data sharing policy is. Then there will be a guided discussion of current and future strategies for cooperation between projects. The goal of the workshop will be to develop a Memorandum of Understanding, a XML standard for sharing data and a working group that continues to be active after the conference. **Facilitator:** Chuck Bargeron, Information Technology Director, Center for Invasive Species and Ecosystem Health, University of Georgia

Exotics Management and Control – Tools and Techniques 10:30 a.m. – 12:00 p.m. TENNESSEE B

This session will be a discussion of the use IPM techniques recommended for the control of the most invasive plant species in the eastern US. Steve and Lee will discuss the techniques that have evolved over the last fifteen years that are specific to invasive plant management from assessments to restoration techniques. A strong emphasis will be placed on tools and equipment that are best used for treating these prolific invaders. **Facilitators:** Steve Manning, President and Lee Patrick, Vice-President, Invasive Plant Control, Inc.

NAA Focus Group Discussions Lunch - Bring Your Lunch 12:15- 1:20 p.m. SALON A/B

Join with NAA board members to discuss topics that are "hot" in NAA right now. There will be 2 focus groups for sure and more may develop out of discussion at the membership meeting. The two topics on the agenda for now are Certification – Do we need it and What is NAA's Role and Being Responsive to the Needs of Younger Natural Areas Professionals. These discussions will be led by NA board members and the results will be shared with the whole board at the next NAA board meeting.

NAEPPC Lunch and Meeting

12:00 p.m. - 1:20 p.m. SALON E

Join NAEPPC for lunch and participate in an informal exchange of ideas and discussion about the goals of the organization and it plans for future activity. All EPPC/IPC members and those interested in EPPC/IPC are invited.

National Association of Exotic Pest Plant Council Forum 3:30 p.m. – 5:00 p.m. BRENTWOOD/FRANKLIN

This session features a panel discussion on the roles and goals of state EPPCs. We will present a brief history of EPPCs, and describe the range, programs, and importance of these state and regional groiups. Representatives from several EPPCs will profile their organizations and their major initiatives. This will be followed by a panel discussion, including audience questions and comments. We will explore fundamental questions such as: "Should every state have an EPPC?" "What opportunities are there for EPPCs to work together?" "What are the big goals for EPPCs on a national level?" Facilitator: Doug Johnson, California Invasive Plant Council



Schedule of Presentations (morning)

Workshop

Room	Salon E	Brentwood/Franklin	Jackson
Symposium:	Invasive Exotics Prevention: Invasive Risk Assessments - Current Trends	Karst Ecosystem Management: Cave and Karst Ecological Resources Management.	Forest Health: Introduced Forest Insects and Pathogens
Host	Doria Gordon	Cory Holiday	Faith Campbell
Time 8:30-9:00	Will climate change affect weed risk assessments? Sarah Reichard	Contemporary international perspectives in karst resource management and case study from China and Kentucky. Chris Groves	Alien forest insects: recent arrivals, impacts, and management efforts. Robert Haack
9:00-9:30	Accuracy and implications of imple- menting the Australian Weed Risk Assessment for the U.S. Doria Gordon	Tennessee bat work. Andrea English	Efforts made by departments of agri- culture to survey for, delimit, eradicate or suppress exotic forests pests in the United States. Gray Haun
9:30-10:00	The revision of Quarantine 37 (Q-37); addressing the risks associated with the importation of plants for planting. Christa Speekmann	Managing subterranean biodiversity. Julian Lewis	Addressing exotic forest pest problems through multi-agency, multidisciplinary cooperation. Scott Schlarbaum
10:00-10:30	Mid-morning Break	Mid-morning Break	Mid-morning Break
	Invasive Exotics Prevention: Successful Prevention of Invasives from Anthropogenic Pathways	Karst Ecosystem Management: Cave and Karst Ecological Resources Management.	Forest Health: Hemlock Woolly Adelgid
Host	Sarah Reichard	Cory Holiday	Rusty Rhea
Time			Rusty Rhea Biology and life cycle of the hemlock wooly adelgid in the southern Appalachians: Growing up southern. Jerome Grant
	Sarah Reichard Pet projects: Pet industry initiatives to minimize the introduction of invasive species into natural Areas. Jamie	Cory Holiday Useage and management practices for caves and karst for the Southeastern	Biology and life cycle of the hemlock wooly adelgid in the southern Appalachians: Growing up southern. Jerome Grant Impacts of hemlock woolly adelgid in
Time 10:30-11:00	Sarah Reichard Pet projects: Pet industry initiatives to minimize the introduction of invasive species into natural Areas. Jamie Reaser Prevention of invader spread using commonsense strategies to manage control and research efforts, visitors, and development projects: National Park Service and conservation groups	Cory Holiday Useage and management practices for caves and karst for the Southeastern Cave Conservancy, Inc. Bill Overton Why cave gates and why cave restora- tion? – The real reason for gating a	 Biology and life cycle of the hemlock wooly adelgid in the southern Appalachians: Growing up southern. Jerome Grant Impacts of hemlock woolly adelgid in Great Smoky Mountains National Park; Documented and projected. Kristine

Symposium:



Salon A/B	Tennessee A	Tennessee B	Regions Bank
Urban Natural Areas: People and Urban Natural Areas	Invasive Exotics Management and Control: Partnerships Equal Success	Conserving Rare Elements	Land Trust Alliance Siminar: Conservation Easements: Keys to Permanence
Sandy Bivens	Nelroy Jackson	Patricia Cox	Leslie Ratley-Beach Laurel Florio
No child left inside: How the chil- dren in nature movement protects natural areas. Vera Vollbrecht and Ken Voorhis	National Invasive Species Council and partnering. Chris Dionigi	Global climate change, Endangered Species Act, and rare elements: How do they relate? Patricia Cox	
Volunteers and partnerships much more than just free labor. Mary Travaglini	Be Plantwise: a national partner- ship to prevent the spread of inva- sive species across the urban/ wildland interface. Damon Waitt	An overview of the All Taxa Biodiversity Inventory (ATBI). Peter White	
Urban natural areas as "living laboratories" for universities. Darlene Panvini, Steve Murphree and Denise Due- Goodwin	Team Arundo – a local partner- ship – and NIWAW (National Invasive Weed Awareness Week) – a national partnership. Nelroy Jackson	Landscope America: The conser- vation guide to America's natural places. Milo Pyne	
Mid-morning Break	Mid-morning Break	Mid-morning Break	Mid-morning Break
Urban Natural Areas: Issues for Urban Natural Areas Managers	Invasive Exotics Management and Control: Partners in Action	Conserving Rare Elements	Land Trust Alliance Siminar: Conservation Easements: Keys to Permanence
Pete Colverson	Tony Pernas	Milo Pyne	Leslie Ratley-Beach Laurel Florio
Bob Parrish, Julia Grant and Dave Borneman	National Park Service – Exotic Plant Management Teams, swing your partner Rita Beard	Conserving rare bryophytes. Paul Davison	
Bob Parrish, Julia Grant and Dave Borneman	Florida's upland invasive Exotic Plant Management Program—The first ten years. Greg Jubinsky	Conservation and monitoring of rare dragonflies. Ken Tennessen	
Bob Parrish, Julia Grant and Dave Borneman	Hawaii's invasive species partner- ships: Providing wise guidance and effective action in an invaders' para-	OPEN	
	dise. Lloyd Loope		

Schedule of Presentations (afternoon)

Room	Salon E	Brentwood/Franklin	Jackson
Symposium:	Invasive Exotics Prevention: Promoting Voluntary Codes of Conduct by Engaging the Right Partners.	Ecological Restoration	Forest Health
Host	Valerie Vartanian	Nelroy Jackson	Nelroy Jackson
Time 1:30-2:00	Promoting voluntary codes of conduct by engaging the right partners. John Peter Thompson	Green infrastructure planning on an active industrial military installation. John Krupovage	Scale of disturbance effects establishment of invasive species: How the emerald ash borer eradication facilitates a secondary spread of invasive plant species. Constance Hausman
2:00-2:30	Status of the voluntary codes of con- duct in Hawai'i. Christy Martin	Functional quality of mitigation wetlands versus natural wetlands: Are wetland functions lost to development replaced by mitigation wetlands? Scott Namestnik	Systematic evaluation of oak regenera- tion in lower Michigan. Jeff Lee
2:30-3:00	Plants for a Livable DELAWARE. Faith Kuehn	Dormant Season Control of Japanese Honeysuckle Using Herbicides and Pentrabark. Thomas G. Barnes	OPEN

3:00-3:30	Afternoon Break	Afternoon Break	Afternoon Break
	Invasive Exotics Prevention: How to Build an Effective Partnership	Conservation On-the-Ground	Forest Health: Firewood
Host	Sarah Reichard		Faith Campbell
Time 3:30-4:00	Christy Martin, Faith Kuehn, Valerie Vartanian, John Peter Thompson	Mainstreaming communication, educa- tion and awareness in biodiversity con- servation policies in Nepal. Deependra Joshi	Carol DiSalvo, Jerry Carlson, Carey Tichenor
4:00-4:30	Christy Martin, Faith Kuehn, Valerie Vartanian, John Peter Thompson	Assessment of vegetatation change in the Loxahatchee river and its major tributaries, southeast Florida. Richard Roberts	Carol DiSalvo, Jerry Carlson, Carey Tichenor
4:30-5:00	Christy Martin, Faith Kuehn, Valerie Vartanian, John Peter Thompson	Conservation significance of America's newest system of protected areas: The National Landscape Conservation System. Jeff Jarvis	Carol DiSalvo, Jerry Carlson, Carey Tichenor
5:00-7:00	Poster Session	Poster Session	Poster Session
	Workshop	Sympos	sium:



Salon A/B	Tennessee A	Tennessee B	Regions Bank
Urban Natural Areas	Invasive Exotics Management and Control: Cooperative Weed Management Areas	Conserving Rare Elements	Land Trust Alliance Siminar: Conservation Easements: Keys to Permanence
Bob Parrish	Kate Howe, Janet Clark	Patricia Cox	Leslie Ratley-Beach Laurel Florio
Effect of removal of the invasive species Lonicera maackii on the size distribution of woody vegeta- tion in a middle Tennessee natural area. Steve Baskauf	Carmen Chapin, Judy Dumke, Chris Evans, Doug Johnson	Smith's longspur winter landing at Arkansas airports. William Holimon	
Utilizing Geographic Information Systems (GIS) for natural area con- servation: A case study of Radnor Lake State Natural Area, Nashville, Tennessee. James Russ		Do shrubland birds prefer shrub- land habitat in a highly modified landscape? Neil Gifford	
Interpretation for Management. Pete Colverson		Floristic inventory of tallgrass prairie remnants in the Grand Prairie region of the Mississippi alluvial plain: A baseline for restoration efforts. C. Theo Witsell	
Afternoon Break	Afternoon Break	Afternoon Break	Afternoon Break
Natural Areas Conservation by Land Trusts	Invasive Exotics Management and Control: Using Volunteers and Partners	Invasive Exotics Tools	Tennessee Land Trusts Network Meeting
Renee Kivikko	Steve Manning	Chuck Bargeron	
Protection through collaboration – building a landscape protection effort. Hugh Archer	Improving invasive alien plant management through partner- ships. Louise Stafford	A user-oriented approach to inva- sive species data aggregation, mapping and decision-making for all taxa. Meg Wilkinson and Gary Knight	
– building a landscape protection	management through partner-	sive species data aggregation, mapping and decision-making for all taxa. Meg Wilkinson and	
 building a landscape protection effort. Hugh Archer Butterfly recovery - A case study 	 management through partner- ships. Louise Stafford Volunteer programs are an essen- tial aid in controlling invasive 	sive species data aggregation, mapping and decision-making for all taxa. Meg Wilkinson and Gary Knight Bugwood: tools for invasive species and forest health manage-	





Poster Presentations

Join us for a Poster Session Reception in the Cumberland Ballroom from 5:00 p.m. – 7:00 p.m. on Wednesday. Meet the poster authors while enjoying appetizers, socializing and entertainment. Cash bar available.

Testing the efficacy of 4 common herbicides for control of Canada thistle. *Matt A. Bahm*

Management techniques for the control of Sahara mustard (Brassica tournefortii) in the Mojave Desert. *Dianne Bangle*

EDDmaps: Early detection and distribution mapping system for invasive species. *Charles T. Bargeron*

An update: chemical control of Japanese spiraea (Spiraea japonica) in Big South Fork N.R.R.A.. *Thomas G. Barnes*

Using spatial analysis techniques to inventory Tennessee riparian ecosystems. *Christopher Bridges*

Exotic annual plant invasions and their relationships to roads and native perennial species in the Mojave Desert, southwestern USA. *Donovan Craig*

Response of non-target phytophagous and transient canopy insects associated with eastern hemlock in the southern Appalachians to imidacloprid and horticultural oil applications. *Carla Dilling*

National Landscape Conservation System: "Creativity and circumstance" The changing paradigm of the Bureau of Land Management. *Marietta Eaton*

Are cooperative weed management areas effective in the eastern United States?: Developing and using criteria to evaluate success. *Christopher Evans*

Insect responses to invasive shrubs in early-successional habitats. *Johanna Fickenscher*

The Invasive Species Assessment Protocol: a tool for prioritizing non-native plants by their negative impact on biodiversity. *Kelly Gravuer*

A restoration rapid assessment tool to categorize/prioritize disturbed sites for management. *Ron Hiebert*

Seed biology—friend or foe to the endangered Physaria ludoviciana. *Marissa Jernegan*

The persistence and expansion of burning bush (Euonymus alatus) populations in southeastern New Hampshire forests. *Rachel Johnson*

The Invasive Plant Atlas of the Midsouth. Victor Maddox

Setting conservation priorities using the GAP's online decision support tool. *Alexa McKerrow*

Typha angustifolia and Phragmites australis: different affects on Rana clamitans and Rana catesbeiana and the implications for management. *Lisa Regula Meyer*

Reclaiming the "temples in the woods": Forest restoration at Oxford College of Emory University. *Erik Oliver*

Potential impacts of invasive shrubs on early-successional avifauna. *James E. Panaccione*

Are populations of multiflora rose (Rosa multiflora) hybridizing with the native swamp rose (Rosa palustris)?: Evidence from molecular markers. *Angela Roles*

Ecological and population genetic patterns of invasion of the rusty crayfish (Orconectes rusticus) into the range of Sanborn's crayfish (O. sanbornii). *Angela Roles*

The effect of various soil treatments on the growth of the endangered Xyris tennesseensis. *Karl Sorensen*

Responses of sahara mustard (Brassica tournefortii) to water addition and soil disturbance manipulations. *Alexis A. Suazo*

Seed germination and methods for breaking dormancy in showy tick-trefoil (Desmodium canadense). *David Susko*

Effects of soil feedback on the growth of invasive shrubs in early-successional habitats. *Kristina Vagos*

A potential risk of using artificial nesting mounds for increasing nesting success in the great lakes piping plover (Charadrius melodus). *Matthew G. Vance*

Amur honeysuckle establishment in central Kentucky mature forests. *Heather Wilson*

Using prescribed fire and herbicides to control the invasion of native trees and smooth brome into native grassland remnants in provincial parks at the southern fringe of the boreal forest, Saskatchewan, Canada. **Rob Wright**

Field Trips & Workshops

Look for a ticket in your name tag pouch showing your preregistered field trip. If you have any questions regarding your scheduled trip, visit the registration table from 7:30 a.m. on Tuesday through 1:30 p.m. on Wednesday. Changing field trips is discouraged, but any field trip changes must be made by 1:30 p.m. on Wednesday.

Box lunches are available for Thursday's field trips. Pick up your box lunch in the hotel foyer from 6:30 a.m. to 9:30 a.m. on Thursday morning. A breakfast cash bar will be available in the hotel.

Assemble in the foyer near the sign for your field trip. Board your designated bus through the doors of the lobby. Look for a corresponding sign in the front window of the bus. Several buses are scheduled to leave at the same time, so please be certain to board the appropriate bus. **Buses will depart promptly at their designated departure times listed in the accompanying table.**

Workshops **FT 21, FT 22, & FT 23** have no classroom component, buses leave at the designated time.

(**FT24**): Invasive Pest Plant Site Management Planning Workshop 7:50 a.m. to 4:45 p.m. Classroom time starts at 8:00 a.m. (Salon E) Vehicles depart at 8:30 a.m.

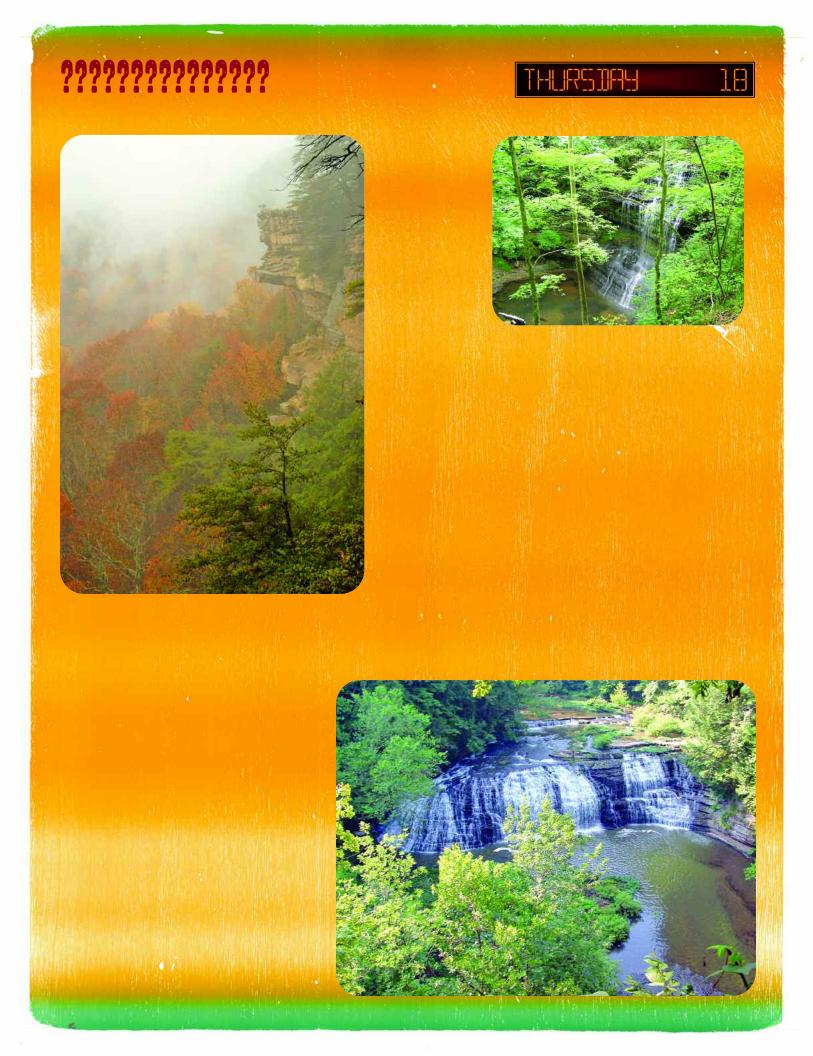
Thursday, Oct 16

Trip #	Destination	Depart	Return
FT01	The Barrens	7:30 a.m.	5:00 p.m.
FT02	Arnold Air Force Base: Natural Areas and Barrens Restoration	8:00 a.m.	5:00 p.m.
FT03	Camp's Gulf Caving Adventure	7:00 a.m.	5:00 p.m.
FT04	Mammoth Cave: Natural Resources of This Rich Karst Region	7:30 a.m.	5:00 p.m.
FT05	Warner Park/Radnor Lake: Urban Natural Area Tour	8:15 a.m.	4:30 p.m.
FT06	Beaman Park/Bells Bend: Metro Parks: from the Rim to the River	8:15 a.m.	4:30 p.m.
FT07	Land Between the Lakes Tour	7:30 a.m.	4:30 p.m.

THURSE DEALS

FT08	Cedar Glades and Barrens: Explore these Interior Low Plateau Ecosystems	7:30 a.m.	4:30 p.m.
FT09	Flat Rock Natural Area and Stones River National Battlefield	9:30 a.m.	4:00 p.m.
FT10	Duck River Canoe Float and Hike	8:00 a.m.	4:30 p.m.
FT11	Harpeth River Canoe Float	8:00 a.m.	5:00 p.m.
FT12	Carter State Natural Area Hiking and Caving	7:00 a.m.	5:00 p.m.
FT13	Swan Conservation Trust Tour: Waterfalls, Seeps, and Springs	7:30 a.m.	5:00 p.m.
FT14	Natchez Trace Parkway/ Land Trust Tour	9:00 a.m.	1-2:00 p.m.
FT15	Rare Crayfish Creek Walk/Wade	9:00 a.m.	5:00 p.m.
FT16	Burgess Falls State Natural Area and Butternut Valley Reserve	7:00 a.m.	5:00 p.m.
FT17	Greeter Falls and Stone Door Hike	7:00 a.m.	5:00 p.m.
FT18	Bon Aqua Woods and HG Hill Property Tour	9:15 a.m.	4:00 p.m.
FT19	Native Plant Nurseries: GroWild Nursery and Prairie	10:00 a.m	.4:00 p.m.
FT20	Birding in Nashville	7:00 a.m.	3:30 p.m.
FT21	Invasive Pest Plant	8:00 a.m.	1:00 p.m.
	Identification Workshop: Identify the Threats to Our Native Landscape		(4 hours)*
FT22	Native Grass ID Workshop	7:00 a.m.	5:00 p.m.*
FT23	GPS Training w/ SE-EPPC- EDDMapS Overview Worksh		3:00 p.m.*
FT24	Invasive Pest Plant Site Management Planning Worksl Classroom time starts at 8:00. Vehicles depart at 8:30.*	-	4:45 p.m.

*See Schedule of Special Events for descriptions



Banquet

THUF?SDF?S

A Night at the Opry A Natural Areas Revival in Music City

Ryman Auditorium 6:30 p.m. – 11:00 p.m.

Join us for a night of good food, drink, music and flat out fun. It's a Natural Areas Revival in Music City, and we are celebrating it at the historic Ryman Auditorium. Built as a church in 1892 by riverboat captain Thomas G. Ryman, it was home of the Grand Old Opry from 1943 to 1974. It is recognized as the "mother church of country music" and the official "birthplace of bluegrass music."

Today it is a National Historic Landmark and it is an award winning venue for a wide variety of music and entertainment. It is also our selection for you to enjoy an evening out while at the Natural Areas Conference in Nashville. View the exhibits (it is a museum), visit the backstage dressing rooms, and stand on stage while enjoying the banquet. You can also record one of 13 favorite tunes in the mini Ryman recording studio.

This also is where we auction off silent and live auction items, honor our award winners, and bid on the infamous Prairie Fire Kit....which means at least a good shot of tequila for whoever wants to make a bid and support the Natural Areas Association. So come out for a night at the Opry and have some fun.

The Ryman is a pleasant walk just three blocks south of the Doubletree Hotel on 4th Avenue. Doors open at 6:30 p.m. - see you there!





Schedule of Presentations (morning)

Room	Salon E	Brentwood/Franklin	Jackson
Symposium:	Grassland Ecosystem Management: Grasslands of the Southeast – An Overview.	Freshwater Ecosystem Management: Aquatic Diversity in the Southeastern U.S.	Invasive Exotics Early Detection Rapid Response (EDRR)
Host	Terri Hogan	Peggy Shute	Les Mehrhoff
Time 8:30-9:00	Introduction to southeastern native grasslands (and what about that squirrel?). Milo Pyne	Overview of aquatic biodiversity and pat- terns of imperilment in the southeastern United States. David Etnier	2008 update on development of the U.S. National Early Detection and Rapid Response system for invasive plants. Randy Westbrooks
9:00-9:30	The grasslands of Tennessee. Dwayne Estes	Managing aquatic systems - conflicts between human needs and conserving the southeast's aquatic biodiversity. Peggy Shute	The Invasive Plant Atlas of New England: A regional approach to early detection of potentially invasive plants. Les Mehrhoff
9:30-10:00	Cedar glades and xeric limestone prairies of eastern United States. Jerry Baskin	Cooperative conservation and restora- tion of the barrens topminnow (Fundulus julisia) on the eastern high- land rim, Tennessee. Geoff Call	Toward a collaborative statewide pro- gram of early detection in Hawaii. Lloyd Loope
10:00-10:30	Mid-morning Break	Mid-morning Break	Mid-morning Break
	Grassland Ecosystem Management: Managing Grasslands with Prescribed Fire.	Freshwater Ecosystem Management: Managing for Aquatic Biodiversity in the Southeastern U.S. – Case Studies	Invasive Exotics EDRR: Invasive Species Mapping – Trends and Data Sharing
Host	Terri Hogan	Peggy Shute	Chuck Bargeron
Time 10:30-11:00	The perpetual forest: Using an undesir- able species to bridge restoration. Kay Kirkman	Cooperative conservation- The Green River, Kentucky example. Richie Kessler	Chuck Bargeron, Chris Evans, John Madsen, Mark Skinner, Georgianna Strode, Jil Swearingen, Damon Waitt, Meg Wilkinson, Amos Ziegler
11:00-11:30	Collaborative landscape-scale fire restoration management and planning in the Boston Mountains, Arkansas. McRee Anderson	Predicting consequences of future changes in flow regimes on aquatic biodiversity: A landscape-scale model- ing approach. Mary Freeman	
11:30-12:00	Grassland responses to fire, grazing and climate: How long-term research can contribute to management of grass- lands in a changing world. John Blair	Pigeon River: A cooperative project to aid the return of aquatic life. Joyce Coombs	
12:00-1:30	Lunch Break	Lunch Break	Lunch Break

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Salon A/B	Tennessee A	Tennessee B	Regions Bank
Invasive Exotics Management and Control: Biocontrol	Global Conservation Issues	Invasive Exotics Impacts from 30,000 feet	State Natural Areas
Bernd Blossey	Ellis Bacon	Doug Tallamy	Karen Smith
Biological control of introduced plants: Rationale, procedures and pitfalls. Bernd Blossey	Ants rule the world, but will they rule the world after climate change? Nate Sanders	Economic costs of invasive plants: Control and management strategies to reduce total impacts. Reuben Keller	
Host specificity screening: Basic principles and future outlook. Hariet Hinz	Modeling potential impacts of cli- mate change on bird habitats in the eastern United States. teve Mathews	Morphing American landscapes: Will there be any 'natural areas' left in 50 years? Scott Schlarbaum	
Direct and indirect non-target effects in biological weed control programs in North America. Mark Schwarzlaender	Ohio, the Nation, the World: All Together Now! Phyllis Wyndle	Invasive exotic vertebrates in conti- nental North America: Diversity, dispersion, impacts, and ecosystem dynamics. Jerry Jackson	
Mid-morning Break	Mid-morning Break	Mid-morning Break	Mid-morning Break
Invasive Exotics Management and Control: Tools and Techniques	Global Conservation Issues	Invasive Exotic Species Impacts on Food Webs	State Natural Areas
Steve Manning and Lee Patrick	Ellis Bacon	Faith Campbell	Karen Smith
	A highway runs through it. Bonnie Harper-Lore	Impact of alien plants on native insect communities. Doug Tallamy	
	Exotic species and bioenergy: Potential for introducing or spreading invasive plants. Joseph DiTomaso	Ecological consequences of exotic earthworm invasions: Forest decline syndrome. Cindy Hale	
	OPEN	Reproductive success of chestnut- collared longspur in native and exotic grassland. John Lloyd	
Lunch Break	Lunch Break	Lunch Break	Lunch Break
Forum or Panel		Contr	ibuting paper

Schedule of Presentations (afternoon)

Room	Salon E	Brentwood/Franklin	Jackson
ymposium:	Grassland Ecosystem Management	Invasive Exotics Management and Control	Invasive Exotics EDRR and Prevention
Host	Geoff Call	Tony Pernas	Les Mehrhoff
Time 1:30-2:00	Tennessee wildlife resources agency pro- grams to restore grassland and shrubland communities. Roger Applegate	The largest weed digital aerial sketch mapping project in the universe: Unless you can prove us wrong! Tony Pernas	Learning by doing: Maryland's EDRR effort for wavyleaf basktetgrass. Kerrie Kyde
2:00-2:30	Status of grasslands of the Central Hardwoods Bird Conservation Region and the birds that depend upon them. Jane Fitzgerald	Incorporating fire into an integrated pest management plan for Lygodium japonicum (Japanese climbing fern). E. Corrie Peterson	Predicting invasion patterns of two exotic invaders in a forest ecosystem. Nitesh Tripathi
2:30-3:00	Arnold Air Force Base: A case study of barrens habitats in the Central Hardwoods Bird Conservation Region. John Lamb	OPEN	New invaders watch program; an arly detection and rapid response network. Debbie Maurer
3:00-3:30	Afternoon Break	Afternoon Break	Afternoon Break
	Grassland Ecosystem Management	NAEPPC Forum: EPPCs Across the Country: Accomplishments and Potential	Invasive Exotics EDRR and Prevention
Host	Dwayne Estes	Doug Johnson	David Moorhead
Time 3:30-4:00	Rehabilitation of native prairie rem- nants in the northern Great Plains. Matt Bahm	Jil Swearingen, Damon Waitt, Amy Ferriter, Kate Howe and Tony Pernas	Occupation, spread, impacts, and miti- gation of Chinese tallowtree in the southern United States. Jianbang Gan
4:00-4:30	Capturing and reporting optimal fre- quency measures in tallgrass prairie as a surrogate measure of density. Michael DeBacker	Jil Swearingen, Damon Waitt, Amy Ferriter, Kate Howe and Tony Pernas	Invasive plant responses to silvicultura practices. David Moorhead
4:30-5:00	Spatial patterns and the changes in underlying heterogeneity of remnant prairies in southern Wisconsin. Carrie Read	Jil Swearingen, Damon Waitt, Amy Ferriter, Kate Howe and Tony Pernas	Python patrol: Involving non-traditiona partners in early detection and rapid response. Alison Higgins

Workshop

Symposium:

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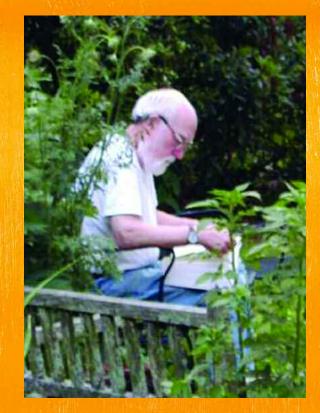
Salon A/B	Tennessee A	Tennessee B	Regions Bank
Invasive Exotics Management and Control: Biology	Global Conservation Issues	Invasive Exotics Impacts	Protected Areas Databases: The Next Generation
Lee Patrick	Ellis Bacon	Doug Tallamy	Kim Herman
Prospects for the classical biologi- cal control of the environmental weed Alliaria petiolata (garlic	RSim: A regional simulation soft- ware environment for exploring the impacts of resource use and con-	Exotic invasive knotweeds (Fallopia spp.) negatively affect native plant and invertebrate assemblages in European	Building the next generation of pro- tected lands inventories for the United States. Larry Orman
mustard). Harriet Hinz	straints. Michael Berry	riparian habitats. Esther Gerber	Utilizing a new online tool (www.land- scope.org http://www.landscope.org/)
Towards the biological control of Japanese knotweed in North America. Richard Shaw	Modeling the effects of strong seasonality on the spatial synchro- nization of raccoon rabies epi- demics. Scott Duke-Sylvester	Seeding effectiveness and natural regeneration of Mojave Desert plant communities after 2005 wildland fires. E. Cayenne Engel	to access national and local scale pro- tected area and priority area maps for conservation. Rickie White
Understanding the biology of Japanese honeysuckle assists in developing effective control programs. Katherine Larson	Assessing alternative management strategies under uncertainty: An example from Everglades restora- tion planning. Louis Gross	Red-imported fire ants (Solenopsis invicta) as an agent of pedoturbation in saline barrens of southern Arkansas. Michael Warriner	Michigan DNR's approach to select- ing biodiversity stewardship areas (representative functional landscapes) on 4.6 million acres of state land using a state level protected areas database. Glenn Palmgren
Afternoon Break	Afternoon Break	Afternoon Break	Afternoon Break
Invasive Exotics Management and Control: Making it Happen On-the-Ground	Global Conservation Issues	Invasive Exotics Impacts	
Nate Fuller	Melinda Welton	Faith Campbell	
Invasive species prioritization and management at a state- wide land trust. Julie Richburg	Conservation stewardship expand- ing protected areas and mitigating for climate change in the Western Cape, South Africa. Kerry Purnell and Chris Martens	Response of native and invasive plants to removal of Lonicera maackii in a successional forest. Troy Evans	
Necessity of both site-based and weed-based invasive plant con- trol. Marc Imlay	Tree mortality and climate change in a Highland Rim karst swamp: Sinking Pond, Coffee County, Tennessee. William Wolfe	The importance of who you are: How native and introduced plants structure aquatic and forest com- munities. Bernd Blossey	
Developing and implementing a management plan to successfully maintain emergent invasive vege- tation frequency and distribution within a natural ecosystem. David Riddell	The genetically altered forest. Gena Fleming	Impacts and control of the invasive species red bartsia (Odontites verna) in tall grass prairie remnants in Manitoba. Brad Kennedy	

Contributing paper

Plenary Speakers

Ed Clebsch

Ed was born and raised in Clarksville, Tennessee. He received bachelor's and master's degrees from The University of Tennessee, Knoxville, and a doctorate from Duke University. He majored in botany, and minored in geology, zoology, and soil science. His professional academic tenure was at The University of Tennessee, Knoxville, after a two year postdoctoral research appointment there. His professional interests during his active career included teaching, natural history, and research on rare plant species and plant communities. He was active in extending the university's mission through public service. He has participated in the Gatlinburg Wildflower Pilgrimage for most of its 58 year history, taught in the non-credit Smoky Mountain Field School for all but one year of its long history, consulted with state and federal agencies and with private industry on environmental matters throughout his active career and since, served the university and his profession in committee work and as an officer in various capacities, and worked for five years as a contract botanist for the Regional Natural Heritage Program of the Tennessee Valley Authority. For the past 2 _ years he has worked as Projects Manager for the nonprofit Foothills Land Conservancy, helping to protect Tennessee's special lands from real estate development. He currently serves on the Education Committee of the Watershed Association of the Tellico Reservoir and the Secretary of Agriculture's Advisory Board for the U.S. Forest Service's Land Between The Lakes.



Plenary Presentation

THE NATURAL HISTORY OF TENNESSEE

Characterize the natural history of 41,217 square miles in 30 minutes? HA! A cross section of the state from the highest point, Clingmans Dome, to the low point at Memphis reveals the Unaka Range, the Valley and Ridge Province, the Cumberland Mountains and Cumberland Plateau, the Highland Rim, the Central Basin, the Western Highland Rim, and the Gulf Coastal Plain. Rocks vary in age from Pre- Cambrian to Recent, with broad geographic coverage by Paleozoics. No Pleistocene glacial evidence, but plenty of periglacial features. The Tennessee River, heavily impounded, is one of the oldest in the world. Climates are humid subtropical (Koppen). Vegetation is mostly temperate broad-leaved deciduous forest. The vascular flora includes 2902 species. Tennessee has more federally listed species than any other landlocked state, largely because of mussel diversity. Protected lands include the Cherokee National Forest, Great Smoky Mountains National Park, nearly 100 state wildlife management areas, eight National Wildlife Refuges, 130 state parks and designated natural areas, many city and county parks, and accelerating numbers of areas protected by private land trusts. The All Taxa Biodiversity Inventory in the Smokies, now 10 years old, includes 6151 (Jan. '08) species new to science or new to the park, and is thought to be less than 10% complete.

Dick Mack

Richard N. Mack (Ph.D, Washington State University, 1971) is a Professor in the School of Biological Sciences at Washington State University. For approximately the last 30 years his research has been largely devoted to the ecology of invasive species. Much of his research has dealt with the aggressive invader, Bromus tectorum (Cheatgrass or downy brome) in the Intermountain West (USA). He has also investigated plant invasions in Hawaii, the southeastern U.S. and China. He is particularly interested in the population biology (including the immigration, demography, competition, and ecological genetics) of plant invaders as well as their environmental effects. He has framed much of his research with the goal of both addressing fundamental and applied aspects of combating invasive species. He served as Chair of the Department of Botany at Washington State University, 1986-1999. He served as Chair from 1999-2001 for the National Research Council's Committee for "Predicting the Invasive Potential of Non-indigenous Plants and Plant Pests in the United States." He has served on the editorial boards of Ecology & Ecological Monographs, Oecologia, Ecological Applications and Biological Invasions. Until recently he served on the SCOPE (Scientific Committee for Problems in the Environment) Executive Committee, and a member of the Board for the Global Invasive Species Programme (GISP). He is currently a member of the IUCN (International Union for the Conservation of Nature) specialist group on invasive species.



Plenary Presentation

PREDICTING BIOLOGICAL INVASIONS UNDER GLOBAL CLIMATIC CHANGE: COMPLEXITY²

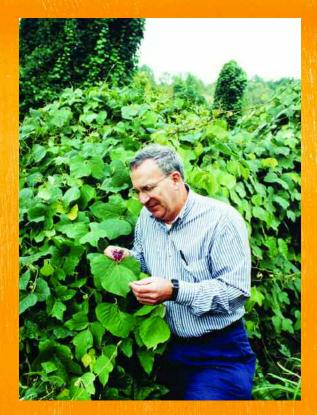
Predicting the identity of future plant invaders, to say nothing of predicting their rate of range expansion and the habitats they will eventually occupy, presents well-known challenges. Global atmospheric change with its repercussions for global climates complicates these challenges much further, as it could create a veritable moving target of possible ranges. Most reliable at this point are predictions of range expansions to higher latitudes as air temperatures increase across almost any spatial scale. Triadica sebifera (Chinese tallow), for example, seems poised to advance much further north in the U.S. as temperatures rise. More common will probably be the upslope movement of species into mountainous regions, including subalpine and alpine areas that had been previously occupied by few alien species; such species movement is reputedly underway in the Alps. Even though General Global Circulation models are in their infancy, several points seem clear: species that can tolerate (and even thrive) with increasingly erratic bouts of drought, punctuated by brief periods of heavy precipitation, will likely expand their ranges. Unfortunately, these species include many ruderals that have already become invaders, e.g. Bromus tectorum (cheatgrass). But the challenge is not limited to the Earth's changing atmosphere affecting plant invasions; some plant invasions are collectively so widespread and have so altered the energy budget of their new ranges that they collectively may already be altering climate. For example, the seemingly inexorable conversion of lowland tropical forest to grassland dominated by invasive species likely contributes to global atmospheric changes.

Plenary Speakers (continued)

INFORMATION 226

Dan Simberloff

Daniel Simberloff is the Nancy Gore Hunger Professor of Environmental Studies at the University of Tennessee. He received his A.B. from Harvard University in 1964 and his Ph.D there (under E.O. Wilson) in 1968. He was a faculty member at Florida State University from 1968 through 1997, when he became the Nancy Gore Hunger Professor of Environmental Studies at the University of Tennessee. His 350 publications center on ecology, biogeography, evolution, and conservation biology, and much of his recent research focuses on causes and consequences of biological invasions. His research projects are on insects, plants, birds, and mammals. At the University of Tennessee he directs the Institute for Biological Invasions, http://invasions.bio.utk.edu/resources/index.html. He was instrumental in formulating presidential Executive Order 13112 on invasive species, and he serves on the IUCN Invasive Species Specialist Group and the IUCN Species Survival Commission. He has served on the federal Invasive Species Advisory Committee, the National Science Board, and the Board of Governors of the Nature Conservancy, and is a past president of the American Society of Naturalists. He currently edits or serves on the editorial boards of Biological Invasions, BioScience, Biodiversity and Conservation, and other journals. He is the translator of "Killer Algae," Alexandre Meinesz's book on the invasion of the Mediterranean by Caulerpa taxifolia. In 2006 he received the Eminent Ecologist Award of the Ecological Society of America.



Plenary Presentation

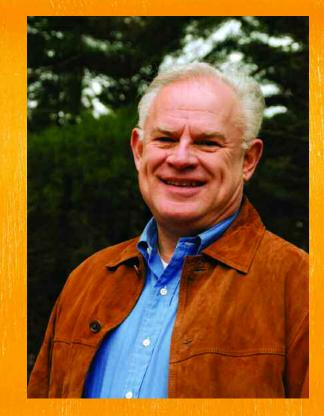
BIOFUEL FEEDSTOCKS: ARE INVASION BIOLOGISTS JUST CHICKEN LITTLES?

The rush to develop biofuels to replace dwindling petroleum supplies may engender unintended ecological consequences. Traits touted as ideal for biofuel feedstocks strikingly resemble those of many non-native plants introduced for forage and/or erosion control that subsequently became invasive. Although invasion biologists have progressed substantially in developing risk assessment tools, predictions that a plant will be safe when grown as a feedstock may be faulty because new genotypes and/or new features of the physical environment associated with cultivation have not been taken into account. Although many more invasive species are introduced than native, native species have also become invasive when genotypes or environments change. Thus native species such as switchgrass are not automatically harmless. Similarly, formerly sterile plant species have become fertile invaders, so sterile hybrids such as Miscanthus are also not guaranteed to be innocuous. Proposals for feedstock production should be evaluated species-by-species and will require research into the basic biology limiting reproduction and/or spread. Even for a species adjudged safe, mass cultivation plans should incorporate risk management procedures to mitigate unexpected invasion. Many introduced species have remained restricted and quiescent for decades before exploding to become widespread invaders, so ongoing monitoring and vigilance are required.

INFORMATION 27

Larry Schweiger

Larry Schweiger became President and Chief Executive Officer (CEO) of the National Wildlife Federation (NWF) in March 2004 with a commitment to confront global warming to protect wildlife for our children's future, connect people to nature, and restore America's wildlife heritage. National Wildlife Federation is America's conservation organization, with 48 affiliates and more than four million supporters. Larry also currently serves on the Board of Directors of the Alliance for Climate Protection. Previously, Larry served for eight years as President and CEO of the Western Pennsylvania Conservancy, where he pioneered and promoted a number of programs, including expanded ecological research and community outreach in high priority conservation areas. Larry is an active community leader, having served on more than 40 governing boards, commissions and committees. He has received many awards for his efforts in conservation, including the Distinguished Service Award for Special Conservation Achievement from National Wildlife Federation in June 1995, and the Conservation Service Award from the Christian Environmental Association in September 1995. He was selected as Pennsylvania's Environmental Professional of the Year in 2002. Larry is married to Clara Schweiger and has three adult daughters, two sons-in-law, and one grandson, Thadius.



Plenary Presentation

CONFRONTING THE CLIMATE CRISIS: WHY WE NEED TO PROTECT THE SKY TO SAVE THE PLACES WE CARE ABOUT.

Global climate change is now a highly documented, rapidly unfolding planetary crisis that will affect everyone and will alter the very nature of tomorrow. In its 2007 report, the Intergovernmental Panel on Climate Change stated that 20-30% of plant and animal species worldwide are "likely to be at increased risk of extinction if increases in average global temperatures exceed 2.2-4.0° F above current levels." This could happen by the end of the century if we do not stabilize global temperatures by reducing global warming pollution. The IPCC also reports "40-70% of species would have significant extinctions if temperatures increase by more than 7.2°F." Clearly, global warming is the single biggest threat facing the earth's natural systems today. As climate change legislation moves forward in the next one or two years, Congress will likely consider investing in natural resources protection and restoration at funding levels that far exceed any amounts ever considered before. The Climate Security Act, recently debated by the Senate, sets the standard against which future bills will be measured. It provides for approximately \$140 billion to be dedicated to U.S. natural resources protection and restoration community with a once-in-a-generation opportunity to confront climate change, rescue species from extinction and protect ecosystems from severe degradation. To seize this opportunity and achieve these objectives, the conservation community must transform the way it does business. Natural resource managers are well-positioned to play a key role in this transformation.

Conference Committees

Brian Bowen	Conference Chair,
	TDEC Division of Natural Areas
	Steering Committee
	Steering Committee
Brian Bowen	Conference Chair, Conference Oversite,
	TDEC Division of Natural Areas
Lisa Smith	Program Chair, Natural Areas Association,
	Mid Atlantic- EPPC (MA-EPPC)
Deb Krauss	Natural Areas Association
Terri Hogan	(NPS) Stones River National Battlefield
	Planning Committee
Lisa Smith	Program Chair,
	Natural Areas Association, MA-EPPC
Steve Pardue	TDEC Tennessee State Parks
Melinda Welton	Tennessee Ornithological Society
John Noel	Southern Coalition for Energy
Terri Hogan	(NPS) Stones River National Battlefield
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Chuck Bargeron	Center for Invasive Species & Ecosystem
	Health at the University of Georgia
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Deb Kraus	Natural Areas Association
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Bill Avant	TDEC Tennessee State Parks
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Chuck Bargeron

Areas

Areas

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This list includes the principal volunteers who have been instrumental in seeing the program through to fruition. There are many others who were involved in the early stages of program development who are too numerous to list, but whose efforts we would also like to recognized. We would like to thank all of the organizations and agencies that provided time for all of the volunteers to participate in making this a successful conference.

INFORMATION 299

The Natural Areas Association

The Natural Areas Association (NAA) has, for nearly 30 years, been providing 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."

The 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.

The NAA primarily exists as a forum for communication among persons involved in the identification, preservation, protection, and management of natural areas and natural diversity. To support those who are committed to natural areas conservation, the NAA:

- Publishes the Natural Areas Journal and the Natural Area News
- Hosts the annual 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 Areas Roundtables
- Provides education and outreach to the Land Trust community
- Serves as a portal to natural areas information and resources

Founded in 1980, the NAA is a 501(c)(3) non-profit organization. To become a member, or to learn more about the Natural Areas Association visit: www.naturalarea.org.

We are living at the time of man's final conquest over the wilderness. What we have saved, and what we may save in the next few years, will be all the true wild nature that will remain to pass on from generation to generation in the years ahead. There will never be another chance. *-George B. Fell, 1950 (NAA Founder)*

The National Association of Exotic Pest Plant Councils

The National Association of Exotic Pest Plant Councils (NAEPPC) was established in October 1995 by representatives of the three state and one regional Exotic Pest Plant Councils that had organized by that time. The Exotic Pest Plant Councils recognized the value of cooperation through a national association of like organizations who shared common goals and thus organized as a coalition to speak with one voice to address invasive plant species issues of national importance.

Since the inception of the first EPPCs and the NAEPPC, a heightened awareness of invasive species has resulted in many positive changes in the U.S., including the formation of many new state and regional non-profit organizations whose purpose is to focus on issues of invasive (exotic pest) plants in natural areas and other wildlands. These organizations have been established as Exotic Pest Plant Councils, Invasive Plant Councils, and organizations with names other than these but whose missions are very similar and have since joined as members of the NAEPPC.

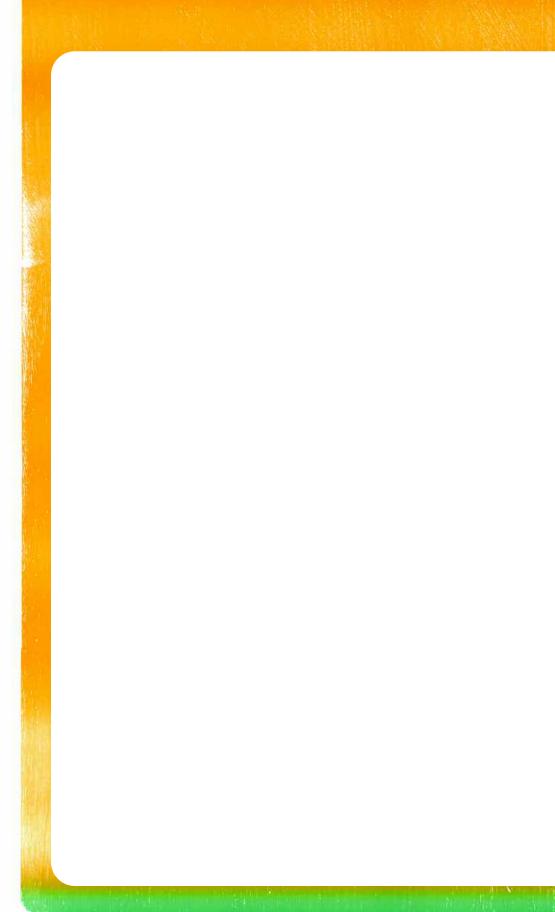
The goals of NAEPPC are:

- Improving the Federal Noxious Weed Act to include weeds of natural areas, and pertinent enabling legislation.
- Increase biological control funding.
- Promote good weed control by federal and other land management agencies and organizations using current technologies including mechanical and chemical methods.
- Improve the methods of prevention of new infestations of exotic pest plants from importation into the USA and through interstate movement.
- Strategies for increasing membership of EPPC units.
- Strategies for increasing funding.
- Strategies for formation of new state or regional EPPC units.

For more information go to http://www.naeppc.org/



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INFORMATION 31

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Living On The Edge: Why Natural Areas Matter

Join us next September for four days at the edge of the world.

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September 15-18, 2009 Vancouver, USA

www.naturalarea.org



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