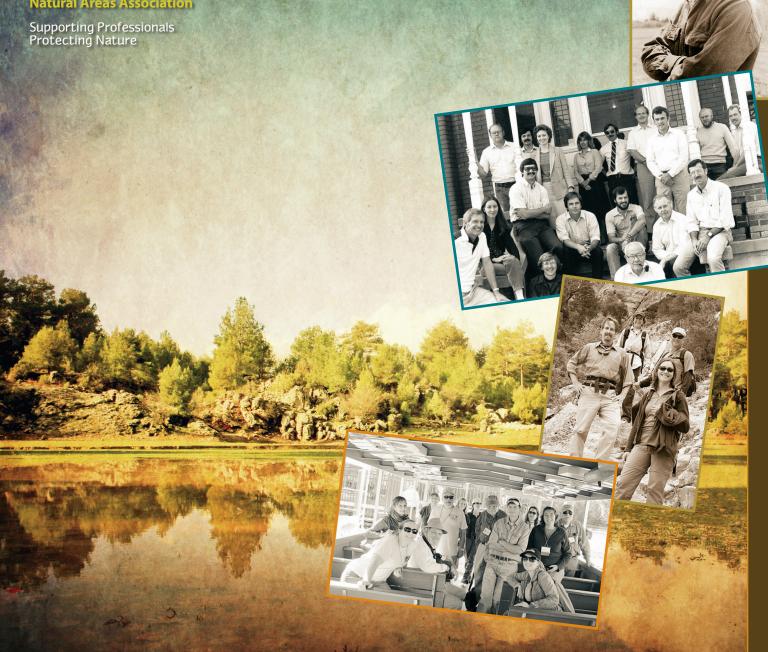


### Natural Areas Association

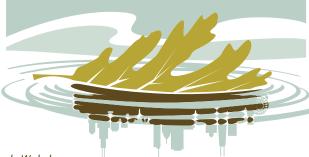


## **CONSERVATION** OMING HON

40TH ANNUAL NATURAL AREAS CONFERENCE

CHICAGO, ILLINOIS OCTOBER 1-4, 2013

Our Mission The NAA's mission is to support the community of natural area professionals. We help members reach their professional goals, promote natural areas management based on sound science, work to raise awareness about the need for natural areas conservation, and support natural areas research.



Tuesday Highlights

## **OPENING PLENARY SESSION** Sauganash Ballroom

WELCOME 1:00-1:05 pm Randy Heidorn, President, Natural Areas Association

1:05-1:15 pm Marc Miller, Director, Illinois Department of Natural Resources

**Arnold Randall,** General Superintendent, Cook County Forest Preserve District and President, Chicago Wilderness

**KEYNOTE ADDRESS** 

1:15-2:00 pm The Future of People and Nature in Cities Sir Peter Crane, Dean, Yale University

HISTORY 2:00-2:20 pm History of Natural Areas Conservation in Illinois and the Nation

Fran Harty, Former President, Natural Areas Association

2:20-2:40 r The State of Natural Areas Conservation **Today and Tomorrow** 

Randy Heidorn, Director, Illinois Nature Preserves Commission

2:40-3:00 pm BREAK

3:00-3:30 pm Natural History of Illinois and the Chicago Wilderness Region

Dr. Brian Anderson, Director, Illinois Natural **History Survey** 

### **PLENARY ADDRESSES**

3:30-4:15 pm Global Change, the Latest Climate Science, and Implications for Natural Area Management

Frank Lowenstein, Climate Change *Specialist, The Nature Conservancy* 

4:15-5:00 pm Landscape Conservation and the Future of Metropolitan America

Robert Pirani, Vice President for Energy and Environment, Regional Plan Association

### **SPECIAL MEETINGS & EVENTS**

9:00 – 11:00 am State Natural Areas Program Roundtable Steamboat Room

Federal Natural Area Program Roundtable – Merchants Room

Natural Areas Journal Editorial Board Meeting – Western Stage Room

11 am – Noon **NA-EPPC Meeting** – Lake House Student/Mentor Meet-up – Steamboat Rm.

5:00 - 7:00 pm Student-to-Professional Speed Networking – LaSalle Room





A regional alliance dedicated to protecting nature and enriching life

Partners & Spansars A HUGE thank you to our Natural Areas Conference supporters. This event would not be possible without your generous support.



## Natural Community Conservators

BOONE COUNTY

DISTRICT







Midwest Prescribed **Groundcovers LLC Fire Council** 

Tennessee Natural Areas Program -

contribution by John Noel



The Natural Areas Association and the Chicago Wilderness alliance are pleased to present the 40th annual Natural Areas Conference, and we extend a sincere welcome to both our regional and out of state guests.

The conference theme, "Conservation Coming Home," reflects Chicago's deep roots in natural areas conservation. More than 300 organizations work through the Chicago Wilderness alliance to pioneer a collaborative, regional approach to conservation in an urban environment. The theme for this landmark anniversary conference also pays tribute to the Natural Areas Association's roots and legacy; the NAA was formally founded in 1978 in Illinois—the first professional organization to connect and represent people working in the natural area preservation and management field.

The Chicago Wilderness region, spanning parts of four states, holds tremendous biological diversity, so we hope that you will take advantage of one of the many field trips to explore the region's prairies, woodlands, bogs, fens and dunes; to learn how local organizations are applying science and natural resource management techniques to advance conservation; or to gain additional technical knowledge in fields including water conservation and renewable energy.

The conference session topics are designed to build our shared capacity to manage natural areas ever more effectively in the face of ongoing and emerging challenges, while ensuring that we build broad public support for these efforts across the country. We hope our student guests will take advantage of the Speed Networking event and Keys to Conservation Careers to learn more about careers in natural resource preservation and management.

There will also be ample opportunities for networking and fun, such as the annual Natural Areas Association Awards Dinner and silent auction on Thursday evening. If you have time outside of the conference, Chicago holds an array of cultural and natural attractions, including a stunning lakefront.

Finally, we'd like to thank the conference planning committee for its work to bring to you a program filled with so many opportunities for information exchange and natural area exploration.

## So get out there - explore, network and enjoy! Have a great time!

Arnold Randall, General Superintendent of the Forest Preserve District of Cook County and Chair, Chicago Wilderness Elizabeth Kessler, Executive Director of the McHenry County Conservation District and Vice Chair, Chicago Wilderness Melinda Pruett-Jones, Executive Director, Chicago Wilderness Lisa Smith, Executive Director, Natural Areas Association

### Information

### **Ouestions**

Staff working the conference registration desk will be glad to help answer any question 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.

### Name Badges

Please wear your name badge to all conference events. It is your ticket to access sessions, workshops, breaks and socials. **Cell Phones** 

Please silence cell phones during sessions as a courtesy to presenters and participants. Meals

Full conference registration fee includes: coffee breaks, hors d'oeuvres at the poster session, field trip box lunch (pick up Thursday morning before departing), and, if you confirmed ahead of time, the Wednesday NAA membership luncheon and Thursday evening awards dinner and auction.

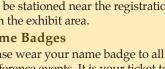
### Auction

Want to bring home a Chicago souvenir from the 40th annual conference and help the NAA continue its work? Stop by the auction display in the Sauganash Ballroom

If you have arranged to donate an item for the auctions, please drop it off at the "Auction" table, located in the registration area, between 8 am and Noon on Tuesday.

## **Exhibitors**

The 14th floor foyer and the Columbian Room will be open from Tuesday morning through Friday Noon to provide participants time to meet exhibitors and browse their displays.





You'll find T-shirts, note cards, artwork, pottery and local foods up for bid at the silent auction. Want something more substantial? Check out the live auction items. Either way, there will be something for everyone! Bid a little, bid a lot, but bid often to make it yours! An annual tradition at the auction will be the live and spirited bidding to win the Prairie Fire Kit. The winning team will have bragging rights for a year and have their name and final bid amount engraved on the drip torch. Auction items will be on display throughout the conference. Silent auction bids are welcome anytime. The live auction will be held during the awards dinner. The silent auction will close shortly afterwards. Cash and credit cards are accepted for payment. All proceeds benefit the NAA.

### Field Trips

Full conference and Thursday daily registrants who pre-registered for a field trip will find a ticket indicating your field trip choice in the back of your name badge. If you have questions regarding your scheduled trip, visit the conference registration desk. Changing field trips is discouraged, but if you do wish to change your trip, you must do so by Wednesday at 2 pm (on a space available basis).

### **Student Awards**

We want to thank those students who entered the student awards presentation. A team of judges has been assembled to judge student posters and oral presentations. Monetary awards and certificates will be awarded to the top student presenters on Thursday night at the awards dinner.

### **Conference T-Shirts**

Official 40th Annual Natural Areas Conference T-Shirts are available at the NAA exhibit booth. These 100% organic cotton shirts make great gifts or souvenirs!

### **Out-of-Towners**

Browse the Chicago Visitor's Guide online at: http://www.choosechicago.com/articles/view/ Get-Official-Guides/160/ ↔

## 2013 Conference

### Schedule at a Glance

3:00 pm – 5:00 pm

5:00 pm – 7:00 pm

Monday, September 30, 4:00 - 8:00 pm — Registration opens at the Holiday Inn Chicago Mart Plaza. Registration is located in the hotel's 14th floor foyer.

**Plenary Session** 



Sauganash Ballroom

LaSalle Room



Thursday, October 3		
Time	Session/Event	Room/Location
7:00 am – 9:30 am	Registration – Holiday Inn Chicago Mart Plaza	14th Floor Foyer
7:00 am – 5:00 pm	Field Trips — Departure times vary. Check page 12 for field trip information. Pick up your lunch before boarding the bus.	
6:00 pm – 9:00 pm	NAA Awards Dinner and Auction	Sauganash Ballroom

### Friday, October 4 Time Session/Event 7:30 am – 9:30 am Registration – Holiday Inn ( 8:30 am – 10:00 am Concurrent Sessions Mid-morning Break 10:00 am – 10:30 am 10:30 am – Noon Concurrent Sessions Noon Conference Adjourns

## Holiday Inn Chicago Mart Plaza



Tuesday, October 1			
Time	Session/Event	Room/Location	
7:30 am – 7:00 pm	Registration – Holiday Inn Chicago Mart Plaza	14th Floor Foyer	
7:30 am – 7:00 pm	Silent & Live Auction Items on Display	Sauganash Ballroom	
9:00 am – 11:00 am	State Natural Area Program Roundtable	Steamboat Room	
9:00 am – Noon	Federal Natural Area Program Roundtable	Merchants Room	
9:00 am – Noon	Natural Areas Journal Editorial Board Meeting	Western Stage Room	
11 am – Noon	NA-EPPC Meeting	Lake House	
11 am – Noon	Student/Mentor Meet-up	Steamboat Room	
1:00 pm – 2:40 pm	Conference Welcome and Plenary Session	Sauganash Ballroom	
2:40 pm – 3:00 pm	Mid-afternoon Break	14th Floor Foyer	

Student-to-Professional Speed Networking

Wednesday,		
Time	Session/Event	Room/Location
7:30 am – 7:00 pm	Registration – Holiday Inn Chicago Mart Plaza	14th Floor Foyer
7:30 am – 7:00 pm	Silent & Live Auction Items on Display	Sauganash Ballroom
8:30 am – 10:00 am	Concurrent Sessions	LaSalle, Steamboat, Merchants, Western Stage and Lake House
10:00 am – 10:30 am	Mid-morning Break	14th Floor Foyer
10:30 am – Noon	Concurrent Sessions	Steamboat, LaSalle, Merchants, Western Stage and Lake House
Noon – 1:30 pm	NAA Membership Meeting and Luncheon	Sauganash Ballroom
1:30 pm – 3:00 pm	Concurrent Sessions	Steamboat, LaSalle, Merchants, Lake House and Western Stage
3:00 pm – 3:30 pm	Mid-afternoon Break	14th Floor Foyer
3:30 pm – 5:00 pm	Concurrent Sessions	Steamboat, LaSalle, Merchants, Western Stage and Lake House
3:30 pm – 5:00 pm	Keys to Conservation Careers	Lake House
5:00 pm – 7:00 pm	Poster Session & Reception	Sauganash Room

2 40th Natural Areas Conference Program
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	Room/Location
Chicago Mart Plaza	14th Floor Foyer
	Steamboat, LaSalle, Merchants, Lake House and Western Stage
	14th Floor Foyer
	Steamboat, LaSalle, Merchants, Lake House and Western Stage

## **Tuesday, October 1**

### **Plenary Speakers**



### Sir Peter Crane Dean, Yale University

Peter Crane is the Carl W. Knobloch Jr. Dean of the School of Forestry and Environmental Studies at Yale University. His work focuses on the diversity of plant life – its origin, fossil history, current status, conservation and use. From 1982 to 1999 he was at the Field Museum in Chicago, and from 1992 to 1999 served as Director with overall responsibility for the Museum's scientific programs. From 1999 to 2006 he was Director of The Royal Botanic Gardens, Kew, one of the largest, most prestigious and influential botanical gardens in the world. He returned to Chicago in 2006 as the John and Marion Sullivan University Professor at The University of Chicago, before being appointed at Yale in 2009.

Dr. Crane was elected to the Royal Society – the UK academy of sciences in 1998 and was knighted in the UK for services to horticulture and conservation in 2004. He is a Fellow of the American Academy of Arts and Sciences, Foreign Associate of the US National Academy of Sciences, a Foreign Member of the Royal Swedish Academy of Sciences, and a Member of the German Academy Leopoldina. He is the recipient of several honorary degrees, including an honorary doctorate of science from Cambridge University, and currently serves on the Board of the Chicago Botanic Garden, the Lady Bird Johnson Wildflower Center at the University of Texas, WWF-US and the Gaylord and Dorothy Donnelley Foundation.



### Frank Lowenstein

Climate Adaptation Strategy Leader, The Nature Conservancy

Mr. Lowenstein serves as climate adaptation strategy lead for the Global Freshwater Team of The Nature Conservancy (TNC). His role includes helping build the case for nature's role in protecting people from climate impacts such as flood and drought, as well as tools and projects to advance that concept. As part of this work, he works with Nature Conservancy field teams and partners in the United States, Colombia, China and Mexico to develop key adaptation projects. He is a Senior Fellow in President Obama's Energy and Climate Partnership of the Americas.

Previously in his 20 year career with TNC, Mr. Lowenstein managed a community-based conservation program focused on eastern US forests and wetlands, supported community based conservation efforts in the Yucatan, developed fire management recommendations for pine forests in the Bahamas, negotiated land conservation transactions in the Northeast, and developed and implemented strategic communications campaigns to increase awareness of forest health issues, including the highly successful "Don't Move Firewood" campaign in the United States. In 2009, he served as executive producer of the award-winning documentary "Lurking in the Trees" which has been shown on PBS channels throughout the country.



### **Robert Pirani**

*Vice President for Energy and Environment,* Regional Plan Association Regional Plan Association has worked since 1929 to improve the quality of life in the 31-county, 13,000 square-mile New York/New Jersey/Connecticut metropolitan area. On the basis of professional research, the Association recommends policy improvements, fosters cooperation among various

government and private organizations,

and engages the public in considering

and shaping its own future. Mr. Pirani's leadership at the Association has focused on the research, planning and advocacy needed to create a metropolitan system of parks and public spaces. Successful campaigns include the creation of a Federal-New York City partnership to jointly manage 10,000 acres around Jamaica Bay; creation of 14 mile Brooklyn Waterfront Greenway; No-cost federal transfer of Governors Island to New York and the National Park Service for park purposes; protection of 70 acre Arlington Marsh on Staten Island; acquisition of 18,000 acre Sterling Forest State Park; and passage of the federal Highlands Conservation Act and Long Island Sound Stewardship Act and the New Jersey Highlands Water Protection and Planning Act.

Mr. Pirani received the 2003 Advocate Award from Environmental Advocates of New York and the 2003 President's Advisory Council on Historic Preservation/National Trust for Historic Preservation Joint Award for Federal Partnerships in Historic Preservation. He was honored by the New York Harbor School Foundation in 2011 for his role in establishing the New York City public high school on Governors Island. Mr. Pirani has served as a founding board member of the four-state Highlands Coalition, Governors Island Alliance, and Brooklyn Greenway Initiative.



### **Fran Harty**

Director of Special Projects, The Nature Conservancy – Illinois

Fran Hardy is a past board member and president (1989-1993) of the Natural Areas Association. He was the lead author of the IDNR's Natural Heritage Residency Program which has had 64 graduate students enroll in a one year residency under the supervision of District Heritage Biologists or other staff since it started in 1993. Over 95% of these young professionals are employed in natural resource related fields today. He provided leadership to incorporate the Illinois Prescribed Fire Council and he is a cofounder of the Prairie State Conservation Coalition (a coalition of conservation land trusts) and served two terms as its president.

Over his 35-year career Mr. Harty worked with staff and partners to establish the 19,000-acre Midewin National Tallgrass Prairie (the first in the nation), to add 9,000 acres to the USFWS at the Savanna Army Depot, and to replace bush honeysuckle and autumn olive and other exotic species with native plants in the IDNR nursery system. He helped write and pass the Illinois Prescribed Fire Bill and amend the Illinois trespass law to allow for personal right of recovery for damages done by ATVs.



### Student-to-Professional Speed Networking

LaSalle Room  $\blacklozenge$  5:00-7:00 pm

Students and recent grads, take advantage of this unique opportunity to make connections with professionals in your desired field! You'll be able to share your background and career aspirations with potential employers and professionals. Speed networking is a fast-paced activity consisting of 10 rotations in which students will speak to a professional for four minutes before moving to the next person. Everyone should come ready to ask - and answer - questions.

### **Randy Heidorn**

Director, Illinois Nature Preserves Commission; President, Natural Areas Association

Randy Heidorn has been a member of the NAA since the early 1980s and on the Board of Directors since 1999 where he currently serves as president. He has served on several committees, and was conference chair for the 2004 Chicago Natural Areas Conference. In 2010, Heidorn gave a plenary address on the history of the natural areas conservation movement. He is excited to share his ideas on where we as a profession and movement can go into the future as we celebrate the past.

Mr. Heidorn serves the State of Illinois as the Director of the Illinois Nature Preserves Commission (INPC), a 50-year-old, model reserve system of over 530 natural areas protected by dedications, conservation easements and other protection agreements. He specializes in stewardship and defense of natural areas working with scientists, staff, contractors, volunteers, NGOs, public and private landowners, Illinois Department of Natural Resources, local states attorneys and the Illinois Office of the Attorney General to conserve natural areas. He led efforts in state government in the development and implementation of the Illinois Prescribed Burning Act which certifies prescribed burn managers in the State of Illinois. His 31-year long career in Illinois government has included service as the INPC Deputy Director for Stewardship, INPC Assistant Director and District Natural Heritage Biologist for IDNR in the Chicago area.



### **Brian D. Anderson**

Director, Illinois Natural History Survey

Dr. Brian D. Anderson came to Illinois in 1985 to become the third Director of the Illinois Nature Preserves Commission (INPC). Under his 10-year leadership the INPC staff grew and protected over 100 new Illinois Nature Preserves. After going on an Intergovernmental Personnel Agreement (IPA) to the National Biological Service, where he helped lay the groundwork for the establishment of the Biological Resources Division within the U.S. Geological Survey, Dr. Anderson returned to accept the position of Conservation 2000 Coordinator with the Illinois Department of Natural Resources (IDNR). He then helped establish the Ecosystem Partnership Program of Conservation 2000, and supported and promoted the Critical Trends Assessment Project, EcoWatch, and Watershed Management programs within IDNR. He also served IDNR as Director of the Office of Scientific Research and Analysis, where he served as liaison between IDNR and the Illinois Scientific Surveys and State Museum; and as Director of the Office of Resource Conservation. He represented IDNR on Governor Ryan's Smart Growth Cabinet and Energy Subcabinet and chaired the development of a proposal for water quantity management in Illinois. Dr. Anderson left Illinois state government after nearly 20 years of service to become Chair of the Department of Biological and Physical Sciences at Lincoln Land Community College (LLCC) in 2004.

Dr. Anderson currently is coordinating the update of the Illinois Natural Areas Inventory, and has recently completed an IPA with the U.S. Fish and Wildlife Service as part-time Interim Science Coordinator for the Upper Midwest and Great Lakes Landscape Conservation Cooperative (UMGL LCC). He serves as a Senior Science Advisor to both the UMGL and the Eastern Tallgrass Prairie and Big Rivers LCC.

## Wednesday, October 2

## **Concurrent Program Sessions**

Room	Steamboat	LaSalle	Merchants
Торіс	INAI Update Symposium	Invasive Species Management	Seed Sourcing Symposium
Time	Moderator: Brian Anderson	Moderator: Kate Howe	Moderator: Kayri Havens-Young
8:30 am	The Illinois Natural Areas Update: Conception, Goals and Structure. <i>Brian Anderson</i>	Managing for Common Conservation Goals in the Chiwaukee Illinois Beach Lake Plain. <i>Debbie Maurer</i>	Planning for the Use of Native Plants in a Changing Climate. Kayri Havens-Young
9:00 am	This Isn't Your Grandma's INA!! Randy W. Nyboer	The Struggle Between Good and Weevil: Biological Control Agents in a Coastal Dune Ecosystem. <i>Claudia Jolls</i>	Seed Zones and Plant Material Movement Guidelines in the Pacific Northwest: Past, Present and Future. <i>Matt Horning</i>
9:30 am	The New INAI Woodland Community Class in South-Central Illinois. <i>Emily Stork</i>	Effects of Biocontrol Weevils and Granivores on the Seed Production and Recruitment of the Threatened Pitcher's Thistle ( <i>Cirsium pitcheri</i> ). <i>Noel Pavlovic</i>	Influence of Dominant Species Seed Source Selection on the Genetic Structure of Subordinate Species. <i>Danny Gustafson</i>
10:00 am		Mid-morning Break	
	INAI Update Symposium	Invasive Species Management	Seed Sourcing Symposium
	Moderator: Brian Anderson	Moderator: Debbie Maurer	Moderator: Kayri Havens-Young
10:30 am	Sedge Meadows in Northern Illinois That Were Identified During the INAI Update. <i>Cindi Jablonski</i>	Status of a Non-native Forb (Echinops sphaerocephalus) in Northeastern Illinois After 50 years. Kurt Dreisilker	Climate-informed Restoration. Julie Etterson
11:00 am	The Illinois Natural Areas Inventory Update: Finding New High Quality Loess Hill Prairies for the Inventory. <i>Meg Engelhardt</i>	Light Level and Herbaceous Response in Managed Oak Woodland: Leaf Litter to Grassy Carpet. <i>Floyd Catchpole</i>	Dynamic and Quantitative Seed-transfer Tools to Assist Forest Restoration Under Climate Change. <i>Kevin Potter</i>
11:30 am	Invasive Plants in High Quality Natural Communities: Using the INAI Update to Determine Status and Risks. <i>Chris Evans</i>	Altered Hydrology Assists the Invasion of Chinese Privet ( <i>Ligustrum sinese LOUR</i> ). in a Natural Area of Southwest Tennessee. <i>Meghan Foard</i>	Native Plant Materials Development Program: Ensuring Options for the Future in a Changing Climate. <i>Peggy Olwell</i>
Noon NAA Annual Membership		Annual Membership Meeting and Luncheon (Sauganash Ball	room)
	INAI Update Symposium	Innovations in Invasive Species Management	Natural Areas Program Relevance and Resilience
	Moderator: John Wilker	Moderator: Chris Evans	Moderator: Larry Smith
1:30 pm	The Unique Natural Communities and Rare Plants of Southern Illinois. <i>Chris Benda</i>	Calumet Invasive Species Conservation Corps Program. Alice Brandon	Strategic Planning for Natural Areas Programs Using Prioritization Decision- Support Tools. <i>Bill Bleckwenn</i>
2:00 pm	Dry Sand Savannas: A Look at the Composition and Structure of High Quality Sites Located in the Kankakee Sand Section During the INAI Update. <i>Connie Carroll-Cunningham</i>	Invasive Plant Seed Viability after Composting. Mark Renz	Natural Areas Restoration Plan for Portland Parks and Recreation. <i>Emily Roth</i>
2:30 pm	Final Results of the Reassessment of Category I Natural Areas. Wayne Schennum	Using Smart Phones for Invasive Plant Outreach and Early Detection. <i>Katherine Howe</i>	Hawaii's Natural Area Partnership Program-Twenty Year Review and Future Direction. <i>Randy Kennedy</i>
3:00 pm		Mid-afternoon Break	
	INAI Update Symposium	Innovations in Invasive Species Management	Natural Areas Program Relevance and Resilience
	Moderator: John Wilker	Moderator: Chris Evans	Moderator: Philip Willink
3:30 pm	Illinois Sustainable Natural Areas Vision. Deanna Glosser	A Large-scale Survey and Strategic Control of Bush Honeysuckle ( <i>Lonicera maackii</i> ) in Southern Illinois. <i>Karla Gage</i>	Building a Network of Natural Areas to Promote Research, Education and Conservation. <i>Todd Wilson</i>
4:00 pm	A Validation of 30+ Years of Natural Areas Conservation in Illinois; an Assessment of the INAI Update. <i>John Wilker</i>	Managed Goat Browsing for Integrated Conservation and Livestock Production in Degraded Oak Ecosystem. John Harrington (presented by Cherrie Nolden)	Science, Politics, Dramas and Discoveries. Stephan Packard
4:30 pm	Panel Discussion	Panel Discussion	Hidden Diversity Along Chicago's Lakefront: Rare and Common Fishes in an Urban Setting. <i>Philip Willink</i>
		All Sessions Adjourn	
5:00 pm			

Room	Lake House	Weste
Торіс	Conserving Rare Species	Land
	Moderator: Anne Mankowski	Mode
8:30 am	A Two Year Plant Population Study of the Puttyroot Orchid in Central Indiana. <i>Megan Smith</i>	Evaluatii Strategie
9:00 am	Fungal Pathogens of Mead's Milkweed (Asclepias meadii). Retha Edens-Meier	Restorat Planning <i>Karen Gl</i>
9:30 am	Reproductive Ecology of Asclepias meadii. Peter Bernhardt	Conservi Manage McHenry
10:00 am	 Mid-mor	ning Brea
	Conserving Rare Species	Land
	Moderator: Anne Mankowski	Mode
10:30 am	Conservation of the Blanding's Turtle in the Chiwaukee Illinois Beach Lake Plain. <i>Gary Glowacki</i>	Climate from Res
11:00 am	Dragonflies, Roads and Bridges: Strategies for Reducing Adult Dragonfly Mortality. <i>Amber Furness</i>	Restorat Cliff Cha
11:30 am	Establishing a Captive Rearing Program for the Endangered Hine's Emerald Dragonfly ( <i>Somatochlora hineana</i> ). <i>Rachel DeMots</i>	The Vasc Remnan
Noon	NAA Annual Membership Meeting a	nd Lunch
	Conserving Rare Species	Land
	Moderator: Anne Mankowski	Mode
1:30 pm	Habitat Assessments and Conservation Planning for Great- Spurred Violet ( <i>Viola selkirkii</i> ) in North Central Pennsylvania. <i>Adam Hnatkovich</i>	Large-so Conservi
2:00 pm	Results 20+ Years After Seeding Native Grasses into Depauperate preserves. <i>Dennis Nyberg</i>	Online D Todd Bit
2:30 pm	Bryophytes and Lichens as Indicators of Forest Integrity. Scott Schuette	Fixing a Pastoral
3:00 pm	Mid-af	ternoon l
	Keys to Conservation Careers	Land
	Moderator: Lisa Smith	Mode
3:30 pm	Peggy Olwell (BLM), Kayri Havens-Young (Chicago Botanic Garden), Bill Kleinman (The Nature Conservancy), Charles Ruffner (SIU), Jeff Mengler (Hey & Associates, Inc.)	Challeng Right-of
4:00 pm	Hugh Safford (USFS) and Jody Shimp (Illinois DNR)	How to I <i>Jim Alwi</i>
4:30 pm	Question and Answer Session	Restorat County,
5:00 pm	All Se	ssions Ad
5:00 - 7:00 p	m Poster Sessio	n <i>(Sauaar</i>

6 40th Natural Areas Conference Program

### ern Stage

### **Conservation/Restoration**

rator: Amanda Little

ing Restoration Baselines and Designing Management ies for Oak Woodland Restoration. *Robert Fahey* 

tion Map: a Public, Web-based Tool for Spatial g of Ecological Restoration Projects. *lennemeier* 

ving an Archaeological Collection for Land ement: Curating 40 Years of Archaeology at ry County Conservation District. *Sara Pfannkuche* 

### k

**Conservation/Restoration** 

### rator: Mike Leahy

Disruption Effects in Boreal Forest of Alaska: Lessons search Natural Areas and Bonan. *Glenn Juday* 

tion of 57 Miles of the White River in Central Indiana.

cular Flora of Blackland Prairie and Woodland nts in the Coastal Plain of Arkansas. *Theo Witsell* 

### eon (Sauganash Ballroom)

**Conservation/Restoration** 

### rator: Ryan Klopf

scale, High Diversity Restoration as a Strategy for ving a Fragmented Ecosystem. *John Shuey* 

Deer Reduction Program Management 2.0. *trner* 

Broken Land: Efforts to Rehabilitate Afghanistan's I Landscape. *Charles Ruffner* 

### Break

**Conservation** /**Restoration** 

rator: Tracy Boutelle-Fidler

ges of Establishing a Class C Prairie in the Utility f-Way. *Kevin Jury* 

Plant 3000 Gallon Prairie Plants Using No Hand Tools. *ill* 

tion/Remediation of the Grand Calumet River - Lake Indiana. *Carl Wodrich* 

### ourn

nash Ballroom)







### Symposia Descriptions

## The Illinois Natural Areas Inventory Update

### Moderator: John Wilker 8:30 am - 5:00 pm + Steamboat

In 1978 Illinois was the first state to complete a comprehensive inventory of natural areas on both public and private lands, resulting in identifying key natural areas to conserve. The INAI also jumpstarted the natural areas movement in Illinois with development of creative funding, legislation and management initiatives. As a result, over the years it exceeded the original intent, becoming quasiregulatory, and while it was continually updated these were not done systematically. Due to the new uses of the INAI and with noticeable changes on the landscape, the decision was made to systematically update the high quality natural community category of the INAI through a public and private partnership. In 2008 field efforts began to both look for new INAI sites and assess the quality of existing sites. The

INAI Update used new technology and upgraded techniques that led to the identifying of over 200 new proposed nature areas. A re-evaluation of many of the existing sites showed that while there was marked degradation in natural quality at some sites, protection and stewardship were important in maintaining high quality. This symposium will feature key individuals involved with the administration, field efforts and use of the data. It will also discuss results of the surveys. specific natural community types found around the state, changes in the natural community classification system, and new conservation measures developed to link landscapes and refresh the natural areas movement once again. The symposia will conclude with a panel discussion on the future of the INAI.

## Seed Sourcing in a Changing Climate

### Moderator: Kayri Havens-Young 8:30 am - 12:00 pm + Merchants

For decades, the "local is best" paradigm has been the gold standard for restoration. Numerous studies have shown that plants become locally adapted and do best when planted in their home (or a very similar) environment. This has led to the development of seed transfer zones, geographic delineations of areas where seeds can be moved around with minimal risk of maladaptation. However, the reality of climate change and its effects on plants, have led many to ask if seed

sourcing practices should change. This symposium will cover evidence for local adaptation, how seed transfer zones are delineated, how climate change is affecting plant populations, the concept of dynamic seed transfer zones and how these genetic issues are (and are not) considered when seeds are sourced for very large scale restoration and rehabilitation projects in the U.S. 🗞

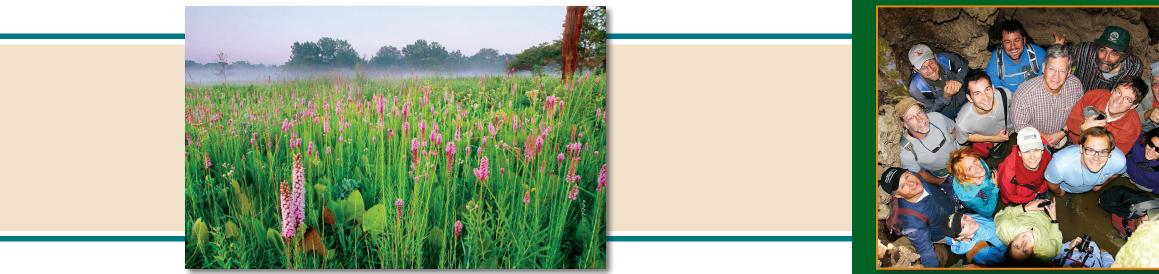
## **Thinking Creatively: Innovative Approaches** to Invasive Species Management

*Moderator:* Chris Evans 1:30 pm - 5:00 pm + LaSalle Invasive species can be difficult and expensive to manage. Limited resources and a host of invaders have led to some out-of-the-box thinking and creativity. This symposium focuses on projects and programs that use new and innovative approaches to address invasive species. From using new technologies to find and



## **Keys to Conservation Careers**

Moderator: Lisa Smith 3:30-5:00 pm + Lake House College students, recent grads and others interested in and state agencies, non-government conservation exploring careers in conservation fields will get firstgroups and private firms will give brief presentations hand knowledge of how to prepare for a successful about how they got started in their professional careers career, and what you can expect from a variety of and the kind of knowledge, skills and abilities they different jobs in conservation. Employees from federal look for when hiring new staff. 🖘





approach to invasive species. This symposium will feature 5 presentations on different creative projects and a panel discussion where the audience can interact with the presenters and discuss invasive species management ideas and innovations. 🖘



Please join us! NAA Annual Membership **Meeting & Luncheon** Wednesday, Noon - 1:15 pm Sauganash Ballroom

All current NAA members are invited and encouraged to attend. Come celebrate NAA's 35th birthday with us! Meet your fellow members and reunite with old friends! The meeting will also include: an update on the NAA, election of NAA board members, a test drive of NAA's new website and all it has to offer, and the opportunity to network with other NAA members and share your ideas. Lunch is provided for those who pre-registered.

## Wednesday, October 2

### Poster Presentations 5:00-7:00 pm

### **Student Participation**/ Networking

Natural Area Association **Student Program: Benefits and Opportunities for Students** 1

Jody P. Shimp, Illinois Department of Natural Resources, Jody.shimp@illinois.gov

### **Conservation Education**/ **Capacity Building**

Plants, People and Pedagogy: **Development of the Northern** Michigan University Native Plants Study Area. 2

Ron Sundell, Northern Michigan University, rsundell@nmu.edu

### Learning with Loppers. 3

Jessica Prince-Sharrar, Forest Preserve District of Will County, jprince@fpdwc.org

### **Marketing Communications** and Outreach

Next Door Natural Areas: Case **Studies of Green Infrastructure** Communication in a Chicago Suburb. 4

Robyn Flakne, Village of Glenview, rflakne@glenview.il.us

### **Invasive Species Management**

**Resetting Restoration: Putting Prairie Plantings Back** into Agriculture as a Weed Management Strategy. 5

Stuart Orr, The Nature Conservancy, Indiana Chapter, sorr@tnc.org

**Biological Control of Cogongrass** (Imperata cylindrical): Preliminary **Results of Surveys in East Africa.** 6 James Cuda, University of Florida, jcuda@ufl.edu

**Oriental Bittersweet** (Celastrus orbiculatus) Invasion in Newton County, Indiana: Case Study of Point. 7 Tony Capizzo, The Nature Conservancy Indiana, acapizzo@tnc.org

### **Natural Areas Program Relevance and Resilience**

**Assessment of the Natural** Areas Network in the Pacific Northwest for the Study of Climate Change. 8 Margaret Massie, Oregon State University, Margaret.massie@oregonstate.edu



### **Qualitative Analysis of IPM Techniques.** 9

Benjamin Clevenger, Southern Illinois University, benjamin@siu.edu

### Land Conservation

The Contribution of Soil **Aggregates to Carbon** Sequestration in Restored Urban **Grasslands.** 10 Jennifer Yost, Lake Forest College, yostjl@mx.lakeforest.edu

The Role of Limited Light in a **Missing Generation of Seedlings** in a Mature and Successional Forest, 11 Robert Yamulla, Franklin

and Marshall College, ryamulla@fandm.edu

Hierarchical Framework for Wadeable Stream Management and Conservation in Illinois. 12 Jodi Vandermyde,

jodi.vandermyde@illinois.gov

**Partnering for Sustainable Quaking Aspen: Using Science** and Management to Promote System Resilience. 13 Paul Rogers, University of Utah, p.rogers@usu.edu

Land Trust Volunteerism, **Eco-Restoration and Conservation Easement** Adoption. 14 James Farmer, Indiana University, jafarmer@indiana.edu

### Other

The Cache River: How Hydrological Changes of the Past Affect the Landscape Ecology as **a Whole.** 15 Richard Nesslar, SIU Center for Ecology (IDNR),

rnesslar8933@siu.edu

**Trait Comparisons of 33** Switchgrass and Big Bluestem **Ecotypes Grown in 3 Soil Types.** 16 Susan Kirt, Argonne National Laboratory, susan.kirt@gmail.com

**Evaluation of the Structural**, **Fluvial and Biological Function** of Logjams in the East Branch Little. 17

Jana Cram, Valparaiso University, Indiana Dunes National Lakeshore, jana cram@nps.gov

### Land Conservation/ Restoration

**Using GIS to Map Potential** Vernal Wetlands in the **Chippewa County Forest and** Chippewa Moraine State. 18 Sheng Vue, University of Wisconsin Stout, vuesh@my.uwstout.edu

**Conserving and Improving the** Habitats of a Western Wisconsin Natural Area. 19

Jessica Lusk, Department of Biology, University of Wisconsin Stout, luskj@my.uwstout.edu

### **Conserving Rare Species**

**Fitness and Variation in** Morphological Characteristics in Hybrid Progeny of a Native and Non-native Echinacea. 20

Stuart Wagenius, Chicago Botanic Garden, swagenius@chicagobotanic.org

Scale and Structure of **Determinants of Native Bee Community Composition.** 21 Noel Pavlovic, U.S. Geological Survey, *npavlovic@usgs.gov* 

Botanic Garden,

**Preliminary Fire Needs Assessment for Tallgrass Prairie** and Oak Savanna Ecosystems. 24 Tracy Hmielowski, University of Wisconsin-Madison, thmielowski.tpos. firescience@gmail.com

## Managing Climate

Esther Stroh,

**Conservation Planning for** Great-spurred Violet on State Game Lands: a Look at the Pennsylvania Game Lands Management Tool. 22

Adam Hnatkovich, Western Pennsylvania Conservancy, ahnatkovich@paconserve.org

A Spatial Analysis of Rare Plant Occurrences Across the **Chicago Wilderness.** 23

Rachel Goad, Chicago rgoad@chicagobotanic.org

**Fire Ecology and Management** 

**Disruption Effects Exposure**, Sensitivity and Adaptive Capacity of Midwest National **Parks to Projected** Climate Change. 25 estroh@usgs.gov

Hawaii's Watershed Initiative Rain Follows the Forest. 26 Randy Kennedy, Hawaii Natural Area Reserve System, randall.w.kennedy@hawaii.gov

Please join us ...

Wednesday evening for the Poster Session and Reception. Chat with poster presenters and mingle with your fellow attendees. Complimentary hors d'oeuvres and cash bar.





## **Thursday, October 3**

### **Conference Field Trips**

Your field trip selection is indicated on a ticket in the back of your name badge. If you have questions regarding your scheduled trip or if you'd like to change your trip, visit the registration table between Tuesday at 7:30 am and Wednesday at 2:00 pm (changes can only be made on a space available basis). Field trips will depart from Orleans Street, located on the east side of the Holiday Inn. Prepared lunches can be picked up right before you board your bus. Lunches are being provided by John Barleycorn Restaurant. Bring appropriate outdoor gear and an extra bottle of water. *Please arrive at least 20 minutes before your scheduled departure.* Vehicles will depart promptly at the scheduled departure time. *S* 

No changes can be made after Wednesday at 2:00 pm.

Number	Title	Departure	Return
FT-1	Acid to Basic in Wisconsin: Beulah Bog and Lulu Lake	7:00 am	5:00 pm
FT-3 <sup>1</sup>	Behind the Scenes at the Field Museum and Shedd Aquarium	9:00 am	4:00 pm
FT-4	Canoe the Lower Fox River	8:30 am	4:00 pm
FT-8	Exploring the Calumet Region	7:30 am	5:00 pm
FT-9 <sup>2</sup>	Fens: More than "Peat with Calcarious Seepage". A Tour of Bluff Spring Fen and Trout Park Nature Preserves	7:30 am	4:00 pm
FT-10	Hine's Emerald Dragonfly Habitat Restoration in the Des Plaines River Valley	8:30 am	4:30 pm
FT-11	Hoosier Prairie Nature Preserve and Cowles Bog	7:30 am	5:00 pm
FT-12	Invasive Ornamental Plant Symposium at the Chicago Botanic Garden	7:00 am	2:30 pm
FT-14	Kankakee Sands	7:00 am	5:00 pm
FT-15	Kayak Historic Waterways and McKinley Woods Bluff Restoration Project	8:30 am	4:00 pm
FT-18	Midewin National Tallgrass Prairie	7:30 am	5:00 pm
FT-23	Spring Bluff Fen Nature Preserve and Illinois Beach State Park	8:30 am	4:30 pm

<sup>1</sup> Participants must travel on their own. Arrive at the Field Museum at 9:00 am.

<sup>2</sup> The trip will now leave by bus, not train. Note change in departure time.

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## MAA Awards Dinner & Auction

### 6:00 pm - 9:00 pm + Holiday Inn + Sauganash Ballroom

The awards dinner kicks off at 6:00 pm with a cash-bar social. Mingle with friends and colleagues, and bid on an array of silent auction items! Dinner will be served at 6:45 pm. Full-conference attendees and those who pre-registered for the awards dinner will have dinner tickets in their name badges. The NAA will honor recipients of the **Carl N. Becker Stewardship Award** and the **George B. Fell Award**. Please join us in acknowledging these very deserving individuals. Also, plan to participate in the exciting **live auction** and attempt to win the Prairie Fire Kit for your team! All auction proceeds benefit NAA programs.



Natural Areas Association Supporting Professionals Protecting Nature



the Natural Areas Association (NAA) has 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, researchers, program staff or volunteers.

To support those who are committed to natural areas conservation, the Natural Areas Association -

- Hosts the annual Natural Areas Conference
   Allows members to stay informed and con
- via our new interactive website
   Develops special reports such as "The State State Natural Area Programs"
- Facilitates special programs and working groups such as the State and Federal Natu Areas Roundtables

To become a member, donate or to le visit *www.naturalareas.org* 

The NAA is a professional association and a 501(c)(3) non-profit organization.



ce	Provides education and outreach to the land trust community
nnected	🤜 Sponsors student chapters, inspiring
	and supporting those interested in
tus of	conservation careers
	<ul> <li>Serves as a portal to natural areas information and resources</li> </ul>
ıral	✓ Is the "voice" for natural areas practitioners on issues of legislation, funding, and policy

### To become a member, donate or to learn more about the Natural Areas Association,

## Friday, October 4

### **Concurrent Program Sessions**

Room	Steamboat	LaSalle	Merchants
Торіс	100 Years in the Making: Forest Preserves of the Greater Chicago Region	Invasive Species Management	Fire Ecology and Management
Time	Moderator: TBD	Moderator: Karla Gage	Moderator: Stuart Wagenius
8:30 am	Chip O'Leary, Forest Preserves of Cook County	Management Strategies for Restoration of Cowles Bog Wetland Complex. <i>Daniel Mason</i>	Prescribed Prairie Burns Influence Reproduction of the Purple Coneflower (Echinacea angustifolia). Stuart Wagenius
9:00 am	Scott Meister, Forest Preserve District of DuPage County	Mexican Red-Bellied Squirrel Eradication Efforts in Biscayne National Park. <i>Tony Pernas</i>	Vegetation Analysis of Lake County Forest Preserves' Woodland Communities. <i>Ken Klick</i>
9:30 am	Drew Ullberg, Kane County Forest Preserve District	Biological Invaders, Assessing Behavioral and Physiological Constraint-breaking Adaptations in Controlled and Natural Settings. <i>Sonny Bleicher</i>	25 Years of Fire at Nachusa Grasslands, a Discussion on How Much Tire Is Enough. <i>Bill Kleiman</i>
10:00 am		Mid-morning Break	
	100 Years in the Making: Forest Preserves of the Greater Chicago Region	Invasive Species Management	Fire Ecology and Management
	Moderator: TBD	Moderator: Tony Pernas	Moderator: Randy Heidorn
10:30 am	Debbie Maurer, Forest Preserves of Lake County	Threats and Opportunities of Invasive Alien Species in Wetland Conservation of Nepal. <i>Deependra Joshi</i>	Effects of Prescribed Fire on Hardwood Resprouting in a Southeastern U.S. Pine Dominated Ecosystem. <i>Tracy Hmielowski</i>
11:00 am	After Agricultural Fields Are Acquired to Create Greenways – Working Through a Farm License Program to Restore and Maintain Native Communities. <i>Julianne Mason</i>	Environmental Discourses in Borana Oromo: A Focus on Narratives. <i>Teshome Tafesse</i>	Fire Ecology of Ungrazed Eastern Tallgrass Prairie: Repeated Burning Increases Diversity. <i>Marlin Bowles</i>
11:30 am	Brad Woodson, McHenry County Conservation District		
Noon		Conference Adjourns	

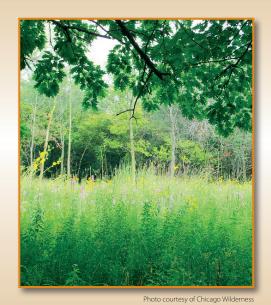
Room	Lake House	Wester
Торіс	Conservation Education/Capacity Building	Land C
Time	Moderator: Jody Shimp	Modera
8:30 am	Utilizing Service Learning to Restore Suburban Wetlands. Sarah Cech	Sustainab on Foreste
9:00 am	Learning with Loppers. Jessica Prince-Sharrar	Regional Restoratio
9:30 am	Savanna Restoration at the Hickory Creek Barrens: Integrating School Kids, Volunteers, Contractors. Julianne Mason	Landscape Between Erin Mitter
10:00 am Mid-mor		rning Breal
	Conservation Education/Capacity Building	Land C
	Moderator: Jody Shimp	Modera
10:30 am	Healing War Wounds Through Conservation Action: A Veterans Conservation Corps for Chicagoland. <i>Ben Haberthur</i>	Threats to interface: Conundru
11:00 am	Making Art in Public Places Work for Your Natural Area. <i>Karen Manci</i>	Bluff Sprii Models. S
11:30 am	Tips for Turning Individual Property Owners into a Community of Champion Land Stewards. <i>Sarah Surroz</i>	Mitigation Resource John Nelso
Noon	Conference	Adjourns

## Friday Symposium

### 100 Years in the Making: **Forest Preserves of the Greater Chicago Region**

### 8:30 pm - 12 Noon + Steamboat

Throughout the 20th Century, the Chicago metropolitan area, with its innovative system of forest preserves and conservation districts, has remained at the forefront of conserving biodiversity within a densely populated urban/ suburban region. Learn about the history, challenges and successes of on-the-ground restoration work; and hear about turning points and current approaches from the Forest Preserves of Cook, DuPage, Kane, Lake, Will and the McHenry County Conservation District. 🖘



## NAC 2013 Exhibitors

The NAA thanks the many exhibitors that have joined us this year. Be sure to stop by the exhibits area in the 14th floor foyer.

Arkansas Natural Heritage Commission	Forest Pre
Biodiversity Project	Illinois As
Bureau of Land Management	and Fores
Byron Forest Preserve District	Illinois De Resources
Chicago Botanic Garden	Illinois Na
Chicago Wilderness	Natural A
ComEd	The Natu
Forest Preserves of Cook County	Truax Cor

### rn Stage

**Conservation/Restoration** 

### ator: Cliff Chapman

ility in Monitoring Federal Conservation Easements ed Lands. James Farmer

Strategy Provides Tools for Conservation and on in Portland, Oregon. *Deborah Lev* 

e-scale Conservation: Bridging the Gaps Public, Private, Professional and Volunteer.

### **Conservation/Restoration**

### ator: Mike Leahy

Quaking Aspen at the Developed Wildland Citizen Science, Collaboration and Conservation ums. Paul Rogers

ng Fen - A Story of Sweat, Bulldozers and Steven Byers

n Strategies to Maintain the Groundwater to a Fen Wetland System in a Highly Alter.

reserve District of Kane County

ssociation of Conservation est Preserve Districts

Department of Natural S

Vative Plant Society

Areas Association

are Conservancy in Illinois

mpany Inc.







### **Conference Planning Team**

NAA Committee Members Renee Boronka, Deb Kraus and Lisa Smith

Chicago Conference Coordinators Lydia Scott, The Morton Arboretum Greg Mueller, The Chicago Botanic Garden

Program Committee Greg Mueller, The Chicago Botanic Garden Kayri Haven-Young, The Chicago Botanic Garden Randy Heidorn, Illinois Nature Preserves Commission Melinda Pruett-Jones, Chicago Wilderness Jennifer Schwartz, The Chicago Botanic Garden

**Field Trips** Susanne Masi, The Chicago Botanic Garden Linda Masters, Openlands Kerry Leigh, The Natural Land Institute

Marketing and Promotions Lucy Hutcherson, Chicago Wilderness Don Parker, Forest Preserve District of Cook County

Exhibits Jeff Mengler, *Hey & Associates* 

Auction Juanita Armstrong, Forest Preserve District of Will County Joseph Roth, Openlands

Audio-Visual Lou Mule, Tallgrass Systems Joseph Roth, Openlands

Volunteers Pat Herendeen, The Chicago Botanic Garden

Poster Presentations, Student Competition and Student Networking Jennifer Schwartz, The Chicago Botanic Garden Megan Dunning, The Morton Arboretum Rafael Rosa, Peggy Notebaert Nature Museum

**Graphic Design** Cheri Craft, Craftworks



Front cover photos: top inset photo – National Areas Association Founder, George B. Fell; 2nd inset photo – US Forest Service meeting in Missouri, 1983



Celebrate Nature

**Chicago Wilderness invites you to** join the conservation community the evening of November 6 to celebrate some of our finest efforts to restore natural landscapes.

The Chicago Wilderness Celebrating Nature benefit event showcases excellence in conservation leadership and site-based restoration through the Excellence in Ecological Restoration and the Conservation and Native Landscaping programs. Enjoy a cocktail reception sponsored by the Chicago Wilderness Corporate Council, followed by dinner, awards and networking at Loyola University's new Institute for Environmental Sustainability.

### See details at www.chicagowilderness.org/celebratenature

The Chicago Wilderness Excellence in Ecological Restoration Program uses professional standards of excellence in natural area restoration and management to recognize conservation leadership and success. The 2014 accreditation process will open on November 1, 2013 to organizations in the Chicago Wilderness region. The program materials and best practices can also be adapted for use in other parts of the country.

Visit www.chicagowilderness.org/eerp for more information.



SPONSOR OF THE CHICAGO WILDERNESS EXCELLENCE IN ECOLOGICAL RESTORATION PROGRAM



PHOTO BY WEG THOMAS

# Chicago Wilderness



Photo: Huffman Prairie Conservation Area on Wright Patterson Air Force Base by David Nolin

## **41st Annual Natural Areas Conference** Dayton, Ohio • October 2014

Hosted by the Natural Areas Association, with co-host Five Rivers MetroParks

In response to feedback from our members, the Natural Areas Conference will take on a slightly condensed format in 2014. Our conference will kick off on Thursday morning with its plenary session leading into an afternoon of concurrent sessions. That evening we'll celebrate at our annual awards dinner, followed by a day of concurrent sessions on Friday. We'll finish off the week with field trips to a variety of western Ohio habitats on Saturday.

Please visit www.naturalareasconference.org for updates.



Natural Areas Association www.naturalareas.org Supporting Professionals Protecting Nature