

# Natural Areas Conference

September 24-27, 2003 MADISON, WISCONSIN, USA

Welcome back to Wisconsin!

anniversary of its State Natural Areas Program.

Leopold's vision of an ecological conscience.

Defining a Natural Areas Land Ethic

Hosted by the Natural Areas Association and the Wisconsin Department of Natural Resources' Endangered Resources Program



In October 1974. Wisconsin hosted the first Natural Areas Workshop at

Wyalusing State Park at the confluence of the Mississippi and Wisconsin Rivers. From that first small gathering of 27 dedicated natural area

Natural Areas Conference as it concludes a year of celebrating the 50<sup>th</sup>

Interwoven through plenary and contributed paper sessions, symposia,

and field trips is this year's conference theme, Defining a Natural Areas

Land Ethic, challenging us to explore the role natural lands play in Aldo

professionals and subsequent workshops, emerged the Natural Areas Association in 1978. Wisconsin is pleased and proud to host the 30<sup>th</sup>





#### CO-HOST

Invasive Plants Association of Wisconsin

#### UNDERWRITERS (\$5,000 +)

National Park Service
The Nature Conservancy-Wisconsin Chapter
USDA Forest Service
Wisconsin DNR Division of Forestry
Wisconsin DNR Division of Land

#### SPONSORS (\$1,000 - \$4,999)

• American Transmission Co. • Applied Ecological Services • Bureau of Land Management • Chequamegon-Nicolet National Forest • Gathering Waters Conservancy • Natural Resources Conservation Service • US Fish and Wildlife Service Region 3 • WE Energies • WI Board of Commissioners of Public Lands • WI State Natural Areas Program

#### **SUPPORTERS** (\$500 - \$999)

• Aldo Leopold Foundation • International Crane Foundation • The Prairie Enthusiasts • University of Wisconsin-Madison Arboretum • Wisconsin DNR Urban Forestry Program

#### PARTNERS (\$100 - \$499)

- Friends of Wisconsin State Parks Gaylord Nelson Institute for Environmental Studies Ho-Chunk Nation
- Madison Audubon Society Milwaukee Public Museum Natural Resources Foundation of Wisconsin
- Rutabaga Wisconsin Academy of Sciences, Arts, & Letters Wisconsin Bird Conservation Initiative
- Wisconsin Chapter of The Wildlife Society

## • Apostle Islands National Lakeshore • City of Madison Parks Division • Dane County Parks Department • DuPont

The conference logo depicts Parfrey's Glen, a cool, mossy gorge incised into the south flank of the Baraboo Hills. It was recommended for purchase by the Wisconsin Conservation Commission's Natural Areas Committee, a group established upon the urging of then-commissioner Aldo Leopold. The glen was acquired in 1947 and later designated as Wisconsin's first State Natural Area in 1952. Parfrey's Glen stands as an enduring symbol of Wisconsin's 50-year legacy of protecting natural areas. Illustration by Louise Leighton. Reproduced courtesy of the Wisconsin Academy of Sciences, Arts, & Letters from the Spring, 1959 issue of Wisconsin Academy Review.



## Wednesday, September 24

9:00 am - 8:00 pm	. Registration
1:00 pm - 3:00 pm	. Welcome and plenary session (Madison Ballroom A-B)
	.Break (Capitol Promenade / Grand Terrace)
3:30 pm - 4:15 pm	. Plenary session (Madison Ballroom A-B)
4:15 pm - 5:30 pm	. Keynote address (Madison Ballroom A-B)
5:30 pm - 7:00 pm	. Dinner on your own
	. Welcome Back to Wisconsin social and poster reception
•	(Grand Terrace / Capitol Promenade / Madison Ballroom A-B)

#### Thursday, September 25

Breakfast	on your own
7:30 am - 6:00 pmRegistration	חכ
8:00 am - 9:30 amSymposia	and contributed paper sessions (Hall of Ideas E-J)
9:30 am - 10:00 amBreak ( <i>Caj</i>	oitol Promenade / Grand Terrace)
10:00 am - 11:30 amSymposia	and contributed paper sessions (Hall of Ideas E-J)
11:30 am - 1:00 pmLunch on y	your own
11:30 am - 1:00 pmOther grou	up meetings as scheduled (Hall of Ideas)
1:00 pm - 3:00 pmSymposia	and contributed paper sessions (Hall of Ideas E-J)
3:00 pm - 3:30 pmBreak ( <i>Cap</i>	oitol Promenade / Grand Terrace)
3:30 pm - 5:30 pmSymposia	and contributed paper sessions (Hall of Ideas E-J)
5:30 pm - 6:30 pmNatural Ar	reas Association Membership Meeting (Hall of Ideas E)
6:30 pm Dinner on	your own
7:00 pm - 10:00 pmOther grou	up meetings as scheduled (Hall of Ideas H-J)
8:00 pm - 10:00 pmScreening	of Wild Places (Hall of Ideas F-G)

## Friday, September 26

	Breakfast on your own
6:30 am - 9:00 am	. Registration
7:00 am - 5:00 pm	. Field trips
5:00 pm - 7:00 pm	. Registration
6:00 pm - 7:00 pm	. Social and silent auction (Madison Ballroom A-D)
7:00 pm - 10:00 pm	.Banquet, awards ceremony, and live auction (Madison Ballroom A-D)

## Saturday, September 27

	Breakfast on your own	
7:00 am - 5:00 pm	Registration	1
8:00 am - 9:30 am	Symposia and contributed paper sessions (Hall of Ideas E-J, Meeting Rooms	K-R)
9:30 am - 10:00 am	Break (Capitol Promenade / Grand Terrace)	
10:00 am - 11:30 am	Symposia and contributed paper sessions (Hall of Ideas E-J, Meeting Rooms	K-R)
11:30 am - 1:00 pm	Lunch on your own	
11:30 am - 1:00 pm	Other group meetings as scheduled (Hall of Ideas)	
1:00 pm - 3:00 pm	Symposia and contributed paper sessions (Hall of Ideas E-J, Meeting Rooms	K-R)
3:00 pm - 3:30 pm	Break (Capitol Promenade / Grand Terrace)	
3:30 pm - 5:00 pm	Symposia and contributed paper sessions (Hall of Ideas E-J, Meeting Rooms	K-R)
5:00 pm	Conference ends	

A general poster session is scheduled for Wednesday and Thursday in the Capitol Promenade. An invasive plant poster session is scheduled for Saturday in the Capitol Promenade.



# General Information

**Questions?** Stop in at the registration counter, or look for attendees wearing green "HOST" ribbons. Urgent messages for attendees will be posted at the registration counter.

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 counter.

**Speaker ready room** • A slide projector and screen to preview slide presentations is available behind Registration Counter 2 (adjacent to Hall of Ideas J) during conference hours. Inquire at the registration counter.

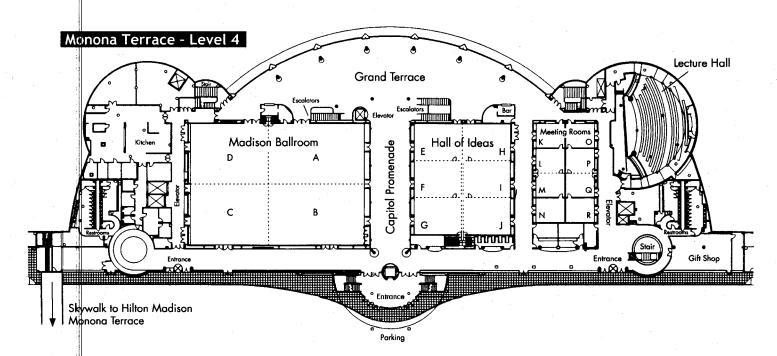
**Dining out** • Except for Friday's banquet and field trip box lunch, all meals are on your own. Madison claims to have more restaurants per capita than any U.S. city, and a variety of ethnic eateries, brewpubs, vegetarian restaurants, and sidewalk food carts are within a short walk of Monona Terrace. Refer to the restaurant list and downtown maps in your conference folder. **Please note:** if you are registered for Friday, a box lunch has been provided for you even if you elected not to attend a field trip. Pick up your box lunch between 6:45 am and 9:00 am Friday morning on Level 1 of Monona Terrace. Unclaimed lunches will be donated to a local food pantry.

Raffle • Don't miss the boat! The Natural Areas Association is raffling a sleek, 12' Sundance kayak made by Perception. A stable, recreational boat designed for lakes, ponds, and slow rivers, the Sundance is great for beginning and experienced paddlers alike. The wide cockpit is easily accessible, with enough extra room for a toddler or dog, and can carry up to 400 pounds. Live far away? We'll ship it to the winner! Get your raffle tickets at the NAA table or from any NAA board member. Drawing at Friday's banquet. You must be present to win.

**Auction** • An exotic array of silent and live auction items will be displayed in the Grand Terrace for your bidding pleasure beginning Wednesday. Bidding will close on silent auction items during Friday evening's banquet, just prior to the live auction. Winning bidders must pay for their items on Friday night. 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 counter.

**Conference T-shirts** • Stop in at the Natural Areas Association exhibit in the Grand Terrace to pick up your official 2003 Natural Areas Conference t-shirt before they sell out. These all-cotton, heavyweight tees sport the conference graphic and sell for \$12.00.

In your free time... See the insert in your conference folder for other things to do in and about Madison before, during, and after the conference. Also, pick up a copy of the Official Madison Visitor's Guide, a Discover Downtown Madison map/guide, and other brochures at the information counter near the entrance.





# Schedule of Special Events & Meetings

#### WEDNESDAY, SEPTEMBER 24

Plenary Addresses • (Madison Ballroom A-B)

1:30 pm Surveying Wisconsin's Natural Landscape

Rob Nurre, Land Records Manager, Wisconsin Board of Commissioners of Public Lands

2:15 pm Leopold, Land Ethics, and Homeland Security

Curt Meine, Director of Conservation Programs, Wisconsin Academy of Sciences,

Arts, and Letters

3:30 pm Conservation from the Other Side: Good Cities are Good for the Environment

David Cieslewicz, Mayor, City of Madison, Wisconsin

**Keynote Address** • (Madison Ballroom A-B)

4:15 pm Protecting Our Wild Places: Where Do We Go From Here?

Michael Dombeck, Pioneer Professor of Global Environmental Management - University of Wisconsin-Stevens Point; University of Wisconsin System Fellow of Global Conservation;

and former Chief, USDA Forest Service

Welcome Back to Wisconsin Social and Poster Reception • After dinner on your own, return to Monona Terrace for dessert and socializing with your fellow conference attendees. View poster presentations and meet the authors. Cash bar available. (7:00 pm - 10:00 pm, Grand Terrace / Capitol Promenade)

## THURSDAY, SEPTEMBER 25 -

Landscape Ecology Symposium: Principles, Application and Implementation • An overview of the field of landscape ecology beginning with a primer on standard principles, moving through application to real world situations, and concluding with a look at state and regional planning processes where landscape ecology provides a foundation for natural area protection. *Underwritten by the Wisconsin DNR's Division of Forestry and Division of Land.* (8:00 am - 5:30 pm, Hall of Ideas E)

**Fire Forum** • Explore the myriad aspects of fire as it is applied for conservation purposes in this two-day forum. Sessions on long-term fire effects, impacts of prescribed fire on various taxa, safety and training issues, and "right to burn" concerns will be addressed. Sponsored by the Natural Area Association's Management and Technology Committee. (8:00 am - 5:30 pm, Hall of Ideas J)

**Big Rivers Ecology Symposium: Diversity, Dynamics and Challenges** • Large rivers contribute an incredible amount of biological diversity to our world. This symposium focused on flowing water systems will focus on that diversity, as well as management strategies and approaches to setting protection priorities. (8:00 am - 9:30 am, Hall of Ideas F)

**Private Lands: Public Interest Symposium** • Speakers will share their experiences working with lands of interest to conservation professionals that remain in private ownership. Case studies, public policies affecting private lands, and the future of private land conservation will be explored. (8:00 am - 11:30 am, Hall of Ideas G)

Midwest Invasive Plant Network Organizational Meeting • Midwesterners are encouraged to gather over lunch to provide input on the need and role for a Midwest regional invasive plants group. Bring your lunch. (11:30 am - 1:00 pm, Hall of Ideas H)

# THURSDAY, SEPTEMBER 25 (continued) —

Natural Areas Association Membership Meeting • Learn about the association's financial status and the activities of the NAA's program committees over the past year. Members will vote on nominees for the Board of Directors. Discuss issues and ideas pertinent to running the organization and to its future plans.

(5:30 pm - 6:30 pm, Hall of Ideas E)

National Association of Exotic Pest Plant Councils Meeting • Representatives of all state and regional EPPCs will report on their activities and share ideas for being effective. All are welcome to learn what is going on elsewhere. (7:30 pm - 9:30 pm, Hall of Ideas I)

Wild Places • Join us for a big-screen presentation of Wild Places, the scenic documentary produced by Wisconsin Public Television in recognition of last year's 50<sup>th</sup> Anniversary of the Wisconsin State Natural Areas Program. This hour-long film showcases the stunning landscapes protected in some of Wisconsin's best natural areas. We'll also show Bringing Back the Cranes, a video highlighting a Wisconsin-based project to create a migratory flock of endangered whooping cranes in eastern North America. (8:00 pm - 10:00 pm, Hall of Ideas F-G)

# FRIDAY, SEPTEMBER 26 ----

Field Trips • Refer to the invoice in your conference packet to confirm your trip selection. Please pick up your box lunch on Level One of Monona Terrace and board your bus 10 minutes before departure. Busses will leave from Level 1 of Monona Terrace, PROMPTLY at their designated departure times (see below).

#_	Trip Destination D	Depart/Return	# Trip Destination	
1 2 3 4 5 6 7 8 9	kickapoo Valley Reserve/Wildcat Mtn. Oak Openings & Prairies/Kettle Moraine Leopold Shack/Int'l Crane Foundation Aquatic Fauna/Lower Wisconsin River Tools & Techniques/Control of Invasives Buttes, Mesas, Wetlands/Glacial Lake Wis. Baraboo Hills Forest Ecology/Protection Faville Grove/Archeology of Aztalan Fens and Bogs/Southeastern Wis. John Muir's Boyhood Haunts	7:30 - 5:00 7:30 - 5:00 8:00 - 4:00 7:30 - 5:00 7:30 - 5:00 7:30 - 5:00 8:00 - 5:00 8:00 - 5:00 7:30 - 5:00 8:30 - 5:00	Prairie Nursery/Restoration Fire in Oak Ecosystems UW-Madison Arboretum UW-Madison Arboretum Mississippi River Bluffs/Rush Creek Grasslands & Barrens/Lower Wis. River Bald Eagles & Prairies/ Private Land Flora and Geology/Devil's Lake Region Baraboo River Restoration	8:00 - 5:00 8:00 - 5:00 8:30 - 12:00 12:30 - 4:00 7:00 - 5:00 8:00 - 5:00 CANCELLED 8:00 - 5:00 8:00 - 4:30

**Social and Silent Auction** • Unwind after a day of field tripping and take advantage of this last chance to bid on silent auction items. A cash bar will be available. (6:00 pm - 7:00 pm, Madison Ballroom A-D)

**Banquet** • Join your colleagues for lively dinner conversation, presentation of the NAA's George Fell and Stewardship awards, raffle, and always-entertaining live auction. Our special banquet speaker is Nina Leopold Bradley, eldest daughter of Aldo Leopold, who will present *For the Health of the Land*. Please bring the banquet ticket found in your name badge holder. (7:00 pm - 10:00 pm, Madison Ballroom A-D)

# SATURDAY, SEPTEMBER 27 -

Invasive Plants of the Upper Midwest Symposium • A comprehensive, full-day symposium including more than 80 talks, panel discussions, and workshops on all aspects of invasive plants. Displays of tools, educational resources, and plant specimens will provide participants with the latest information in the field. Hosted by the Invasive Plants Association of Wisconsin. (Hall of Ideas E-J; Meeting Rooms L,M,O,P,Q)

Invasive Plants Association of Wisconsin Annual Meeting • Members and anyone else interested in learning more about IPAW and its activities are encouraged to attend this lunch meeting and provide input to the board and working committees. Bring your lunch. (11:30 am - 1:00 pm, Hall of Ideas H)

Fire Forum (continued) • See Thursday's description. (8:00 am - 11:30 am, Meeting Rooms L-M)

# Detailed schedule of presentations

MO	Hall of Ideas E	Hall of Ideas F	Hall of Ideas G	
→ ME	LANDSCAPE ECOLOGY SYMPOSIUM	BIG RIVERS ECOLOGY SYMPOSIUM  Moderator: Paul West	PRIVATE LANDS SYMPOSIUM Moderator: Steve Swenson	И
	Introduction to landscape ecology.	An ecological means to flood damage	Recognizing the public interest in pland: building on Aldo Leopold's le Curt Meine	private
:30	Landscape patterns: causes and quantification. Jeffrey A. Cardille	Large-scale floodplain restoration along the Illinois River at Spunky Bottoms and Emiquon. K. Douglas Blodgett	Bringing community into community based conservation: two contrasting studies. Wellington Huffaker	ty- ng case
:00	Connecting landscapes: good, bad, or indifferent? Brent J. Danielson	Defining conservation priorities in the upper Mississippi River: a comprehensive assessment of biodiversity.  Mary L. Khoury	Privately owned lands in the Illino nature preserve system - an endou trend. <i>Don McFall</i>	nis uraging
:30	Break	Break	Break	
.30	LANDSCAPE ECOLOGY SYMPOSIUM	SMALL STREAMS	PRIVATE LANDS SYMPOSIU Moderator: Steve Swensor	IM n
0:00	Moderator: David Mladenoff Using landscape ecology to identify sampling sites across large areas.  Jeffrey A. Cardille	Moderator: Lisie Kitchel  Effects of acidification, crayfish, and forest seral stage on leaf processing in an Allegheny Plateau headwater stream.  Rachel J. Martin	Importance of private lands in the management of chronic wasting d Scott R. Craven	e .
0:30	Western ponderosa pine natural areas: another look at the landscape ecology of fire. William L. Baker	Stream restoration - two Michigan case studies. <i>Greg M. Quartucci</i>	What the future might hold for conservation on private lands.  Paul Johnson	
1:00	Pre-euroamerican forests in northern Wisconsin: historical variability at the regional scale. Lisa A. Schulte	Relationships between environmental setting and vegetation types along streamside slopes within the Sandhill coastal plain province. <i>Donald W. Imm</i>	Panel Discussion: Private lands C. Meine, W. Huffaker, D. McFall S. Craven, P. Johnson	l,
11:30	Lunch	Lunch	Lunch	
11.30	LANDSCAPE ECOLOGY SYMPOSIUM	FLORISTIC QUALITY	EFFECTIVE PARTNERSHIF Moderator: Lisa Smith	PS
1:00	Moderator: David Mladenoff  Prediction of species occurrence in managed landscapes across space and time. Erica Fleishman	Moderator: Ron Hiebert  Vascular flora of the Pembroke savannas, Kankakee County, Illinois. Mary Ann Feist	Stringing the pearls - protecting places along Wisconsin's west co Craig D. Thompson	special east.
1:30	Linking landscape and habitat models to species viability for wildlife conservation and management. H. Resit Akçakaya	Canopy composition and soil characteristics of Fall-line Sandhill communities. <i>Kathryn Madden</i>	Lake Michigan Shorelands Alliand regional land trust collaboration Karen Bassler	ce: a
2:00	Delineation of terrestrial buffers and core habitat around wetlands for amphibians and reptiles. Raymond D. Semlitsch	Vascular flora of Hooper Branch Nature Preserve and the Iroquois County Conservation Area, Iroquois County, IL. D. Busemeyer	Innovative partnerships for const the LaCrosse Blufflands Protecti Program. <i>Cynthia J. Olmstead</i>	ervation: on
2:30	The need for a landscape ecology of invasive spread. Kimberly A. With	Characteristics of biodiversity and conservation in Cuba - situation of the Oriental region. <i>Nicasio Viña-Davila</i>	Natural areas protection and condistricts in Minnesota: an untappressource. John C. Vickery	nservation ped
3:00	Break	Break	Break EFFECTIVE PARTNERSH	IIDS
	LANDSCAPE ECOLOGY SYMPOSIUM	SIGNS WORKSHOP Coordinator: Joyce Bender	Moderator: Rick Thon	n
3:30	Moderator: Randy Hoffman  Ecoregion biodiversity assessment and implementation: examples from the Upper Midwest. Paul C. West	Has it really been since 1989 that we've talked about "signage"? We've come a long way from Carsoniteor have we?	Tennessee Valley Authority nate program: managing sensitive nate resources and providing passive recreation opportunities. Nance	atural : :y D. <i>Frale</i>
4:00	Creating a 50-year vision: Wisconsin's	Fiberglass embedment, laminates, computer generated graphics; what are the products that you are using for interpretive signs and posting boundaries? Please share your successes and your	Paths of support: Deeds and dir the Natural Areas Association. Reid Schuller	rections o
4:30	Identifying significant ecological sites:	failures. None of us have the time or money to spend on signs that don't hold up to vandals, wildlife, and weather.  Please come prepared with examples of	Michigan's Stewardship Networ Sherri Laier	
5:00	Using landscape characteristics to help develop a system of representative reference areas. Randy Hoffman	materials, vendors, costs, signs, and text that really gets your message across.	State comprehensive wildlife or plans: big opportunities for nat conservation. <i>Richard Thom</i>	tural area

ROOM →	Hall of Ideas H	Hall of Ideas I	Hall of Ideas J
TIME	NATURAL AREA PLANNING Moderator: Kim Herman	NATURAL AREA MANAGEMENT Moderator: Craig Thompson	FIRE FORUM Moderator: Randy Heidorn
8:00	Utilizing the Minnesota land cover classifications system as part of an adaptive strategy. <i>Paul J. Bockenstedt</i>	Compositional and structural changes in southern Wisconsin oak forests over the last half-century. Jonathan D. Coop	Compatibility of summer burning with insect conservation. <i>Joe Henry</i>
8:30	Recognizing restorable open oak woodlands and oak savannas by using understory indicator species.  Brian W. Pruka	It's not like it used to be: 50 years of change in the northwoods. <i>Don Waller</i>	Impact of prescribed burning on prairie spiders. Frank Pascoe
9:00	From design to designation: an ecological reference area for the Chequamegon-Nicolet National Forest. <i>Linda R. Parker</i>	The changing vegetation of Wisconsin: lessons from repeat photography.  Lucy E. Tyrrell	Effects of successive fires on insects. Ron Panzer
9:30	Break	Break	Break
	NATURAL AREA PLANNING Moderator: Karen Kramer	NATURAL AREA MANAGEMENT Moderator: Matt Zine	FIRE FORUM Moderator: Randy Heidorn
10:00	Monitoring and conservation of bird populations in the Chequamegon-Nicolet National Forest. <i>Robert W. Howe</i>	Quantifying historical loss of plant species diversity in Milwaukee County, Wisconsin. Lawrence A. Leitner	Controlled burning in the Chicago region.  Jim Anderson
10:30	Selecting effective umbrella species for protection and management: the umbrella species index. <i>Robert B. Blair</i>	Land use legacy effects: exotic plant species distributions sixty years after agricultural abandonment.  Michael A. Huston	Fire temperature regimes in Midwestern wetlands. J. Elizabeth Maas
11:00	Effect of area and isolation on species richness and indices of conservation value in Illinois wetlands. <i>Jeffrey W. Matthews</i>	Management matters, plants differ, assessment methods vary: change in Wisconsin prairie remnants after halfcentury. Mark K. Leach	Fire ecology and management for an endangered mint. <i>Eric S. Menges</i>
11:30	Midwest Invasive Plant Network Meeting	Lunch	Lunch
	FOCUS ON LOCKPORT PRAIRIE  Moderator: Drew Feldkirchner	NATURAL AREA MANAGEMENT Moderator: John Harrington	FIRE FORUM Moderator: Nancy Braker
1:00	An introduction to U.S. Army Corps of Engineers ecosystem restoration programs and to the Lockport Prairie project.  Jean Sellar	Short-term response to severe wind disturbance in a Great Lakes pine forest. Erin M. Ernst	Restoring old growth pine forests with prescribed burns. Becky Marty
1:30	Lockport Prairie: the role of groundwater in sustaining a unique ecosystem and the need for understanding system dynamics. Wayne P. Fassbender	The chips were flying, a tale of stewardship of a new tract of land at Nachusa grasslands. Bill Kleiman	Fire history of a post oak ( <i>Quercus</i> stellata) woodland in Hamilton County, IL. William E. McClain
2:00	Hydrologic modeling for ecosystem restoration, Lockport Prairie, Illinois. Heather E. Henneman	Restoration of oak islands sandscape, Apostle Islands National Lakeshore. Julie F. Van Stappen	Fire and fire surrogates for management of southern coastal plain flatwoods.  Kenneth W. Outcalt
2:30	Plant communities at Lockport Prairie Nature Preserve, their quality and landscape position. Gerould S. Wilhelm	Restoration success? Use of small mammal abundance and pheasant nest locations as metrics to evaluate habitat quality in reconstructed prairies. Shawn P. Schottler	The relative role of fire on plant diversity in oak savannas. <i>Evan Weiher</i>
3:00	Break	Break	Break
	EXOTIC PEST PLANT COUNCIL FORUM Moderator: Brian Bowen	NATURAL AREA MANAGEMENT Moderator: Steve Richter	FIRE FORUM  Moderator: Nancy Braker
3:30	EPPCs and Invasive Plant Councils: organizing to protect natural areas and wildlands.	What changes are "natural"? Monitoring plant community composition in wetlands of the Apostle Islands National Lakeshore, WI USA. <i>James E. Meeker</i>	Planning for prescribed fire: past, present, and future. <i>Kenneth S. Mierzwa</i>
4:00	This forum, hosted by the National Association of Exotic Pest Plant Councils,	Vegetative responses in DuPage County, Illinois woodlands. Scott N. Kobal	UW-Stevens Point fire crew: a novel resource for fire managers in Wisconsin. James E. Cook
]	will present examples of what EPPCs and	Tife	
4:30	Invasive Plant Councils are accomplishing in the Southeast, Mid-Atlantic, Midwest, Florida, California, and elsewhere. Learn how EPPCs are organized and how	Fifty years of biotic impoverishment in Wisconsin forest understory communities: the importance of state parks and research natural areas. <i>Tom Rooney</i>	Making the case for prescribed burning legislation. Carolyn Taft Grosboll

## Detailed schedule of presentations

ROOM →	Hall of Ideas E	Hall of Ideas F	Hall of Ideas G
TIME ↓	IMPACTS OF INVASIVE PLANTS  Moderator: James Reinartz	INVASIVES POLICIES - FEDERAL & LOCAL Moderator: Bonnie Harper-Lore	INVASIVE AQUATIC PLANTS Moderators: Deb Konkel & Frank Koshere
8:00		Unsolved problems in the war on weeds.  Bonnie Harper-Lore	Early spring applications of Aquathol K for control of curlyleaf pondweed and Eurasian water-milfoil. John Skogerboe
8:30	Impacts of invasive plants on native amphibians. <i>Victoria Nuzzo</i>	Invasive plants: recent federal policy advances. Faith T. Campbell	Lime slurry - an innovative management tool for aquatic plants. <i>Meg Rattei</i>
9:00	Using data on impacts of invasive species to help prioritize threats. John Randall	The City of Ann Arbor's invasive species list. David Borneman	A Wisconsin perspective on developing a state aquatic invasive species prevention and control program. Frank Koshere
9:30	Break	Break	Break
	IMPACTS OF INVASIVE PLANTS  Moderator: James Reinartz	CONTROL METHODS FOR INVASIVES  Moderator: Steve Richter	INVASIVE AQUATIC PLANTS  Moderators: Deb Konkel & Frank Koshere
10:00	Microstegium vimineum: Light as a limiting factor in its growth and the effects on species diversity.  Carolyn Cromer	Honeysuckle, not as sweet as its scent. Rick Schulte	Hydrilla verticillata survive Wisconsin winters? It could happen! Kristine C. Maki
10:30	Rhamnus cathartica: replacement or addition of an invasive species into the floodplain forests of the Lower Wisconsin State Riverway. Esther Alsum	Restoring natural processes inhibits the reinvasion of Rhamnus cathartica and Lonicera x bella. Jolene Ackerman	Managing aquatic exotic and invasive species using water fluctuation.  Stanley Nichols
11:00	Discussion forum: Observations and data on impacts of invasive plants.  James Reinartz	Status of kudzu ( <i>Pueraria lobata</i> ) in Illinois: a framework for eradication.  Jody P. Shimp	Identification and invasiveness of North American <i>Typha</i> species. S. Galen Smith
11:30	Lunch	Lunch	Lunch
	INDUSTRY PERSPECTIVES ON INVASIVES  Moderator: Susan Lehnhardt	CONTROL METHODS FOR INVASIVES  Moderator: Hannah Spaul	VOLUNTEERS & INVASIVES Moderator: Kathleen Harris
1:00	Reed canary grass: friend and foe.  Michael D. Casler	Creative use and maintenance of land management tools. Wayne Pauly	Achieving management goals through interns. Kathleen Harris
1:30	Ideas for an improved relationship between the nursery industry and natural areas managers. <i>Michael Yanny</i>	Mechanical brush mowers and other devices for woody species control.  Ron Kurowski	Using volunteers for invasive species land management (e.g. "tug-a-suckle").  Scott Johnson
2:00	Linking horticulture and ecology to prevent plant invasions: voluntary codes of conduct. <i>Kayri Havens</i>	Utilizing rotational cattle grazing in oak savanna restoration. <i>Emily S. Kathol</i>	Using volunteers to collect data about lowa's invasive species. Christopher W. Evans
2:30	Panel Discussion: How do plant related industries view the problem of invasive plants and how will they respond? S. Lehnhardt, M. Yanny, M. Casler, K. Havens, and J. Repsa	Sheep and goat grazing to control invasive plants. <i>Brian Pillsbury</i>	Panel Discussion: Tips and techniques for recruiting and motivating volunteers. K. Harris, S. Johnson, C. Evans, and M. Lerman
3:00	Break	Break	Break
	INVASIVE PLANT EDUCATION Moderator: Mandy Beall	CONTROL METHODS FOR INVASIVES  Moderator: Matt Zine	INVASIVES POLICIES - STATE Moderator: Bonnie Harper-Lore
3:30	Invasive species as resource for academically based experimentation and service learning. Bergwerf and Warners		Cooperative efforts between the horticultural industry and exotic pest plant council in Florida. <i>Doria R. Gordon</i>
4:00	Not in our woods: a model for educating woodland owners about invasives.  Gigi La Budde	Panel Discussion: New approaches for controlling grassland invasive forbs.  Willis Brown, Mike Engel, and Jerry Doll.	Minnesota's exotics experience: a state case study. Jay Rendall
4:30	Clean boats, clean waters. Laura Felda and Mandy Beall		Developing a Wisconsin noxious weed law Dan Wilson

# Detailed schedule of presentations

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ROOM →	Hall of Ideas H	Hall of Ideas I	Hall of Ideas J
TIME	REED CANARY GRASS SPREAD Moderator: Joy Zedler	BIOCONTROL OF INVASIVE PLANTS Moderator: Derek Strohl	FUNDING AND RESOURCES FOR INVASIVES Moderator: Michael Engel
8:00	Factors that influence dominance by reed canary grass ( <i>Phalaris arundinacea</i> ) in wet meadows. Suzanne Kercher	The educational uses of purple loosestrife in biocontrol in the high school classroom. Gregory Bisbee and John Rhude	Wisconsin's forest tax laws and their implications for natural community restoration. <i>Bradley M. Hutnik</i>
8:30	Mapping wetlands dominated by reed canary grass using Landsat thematic mapper imagery. <i>Kevin Willis</i>	Biological control of purple loosestrife in Minnesota (1992-2003) and the potential for biological control of European buckthorn. <i>Luke C. Skinner</i>	Wildlife habitat restoration on private lands: how the U.S. Fish and Wildlife Service can help combat invasive species.  Michael W. Engel
9:00	Processes of floristic degradation in urban and suburban wetlands in northwestern Indiana. Young D. Choi	Biological control of garlic mustard: a status report and what's next?  Bernd Blossey	USDA program assistance opportunities. Robert D. Weihrouch
9:30	Break	Break	Break
	REED CANARY GRASS CONTROL  Moderator: Alice Thompson	BIOCONTROL OF INVASIVE PLANTS Moderator: Derek Strohl	PREDICTION & ASSESSMENT OF INVASIVES  Moderator: Ellen Jacquart
10:00		Biological control of leafy spurge (Euphorbia esula) on Fort McCoy. David J. Beckmann	The trade in live freshwater organisms in the Upper Midwest: what species are involved, what risks are posed?  Reuben P. Keller
10:30	Panel discussion: Reed canary grass control. Arthur Kitchen, Craig Annen, and Dan Spuhler.	Biological control of Eurasian water-milfoil with herbivorous insects.  Raymond M. Newman	Weeds to watch for: plants that may have the potential to become invasive in the Upper Midwest. <i>Kelly Kearns</i>
11:00		Rose rosette disease as a potential biological control agent for multiflora rose. Adrian Barta	Developing an invasive plant policy: Chicago Botanic Garden's experience. Kayri Havens
11:30	Invasive Plants Association of WI Meeting	Lunch	Lunch
	HERBICIDES FOR INVASIVE PLANTS Moderator: Ursula Petersen	INVASIVES AFFECTING FORESTS Moderator: Mariquita Sheehan	PREDICTION & ASSESSMENT OF INVASIVES  Moderator: Ellen Jacquart
1:00	So you've decided to use an herbicide: what are the basics to ensure success and safety? <i>Jerry Doll</i>	Weeds in the woods. Gary Fewless	Modeling the spread of invasive plants on a frequently disturbed military training site, Little Falls, MN. Jill E. Babski
1:30	Herbicides: The do's, the don'ts, the how's and how nots to timing and additives for achieving the best results. Rick Schulte	Skid trails and haul roads and their influence on plant richness and composition. <i>Mariquita Sheehan</i>	Community involvement in controlling Great Lakes invasive coastal plants.  Jaime Corbisier
2:00	Alternatives to conventional herbicides.  Steve Glass	Exotic species in Wisconsin forest understory communities: what a difference 50 years can make. <i>Tom Rooney</i>	Efficient and effective monitoring of invasive plant species. <i>Mandy Tu</i>
2:30	Subtle biological effects of common herbicides. Warren P. Porter	Non-native invasive species on eastern national forests.  Nancy Berlin and Rita Beard	National and regional efforts to inventory, map and assess invasive plants - an update. John M. Randall
3:00	Break	Break	Break
	PHRAGMITES GENETICS AND ID Moderator: Chris Reyes	INVASIVES AFFECTING FORESTS Moderator: Mariquita Sheehan	PREDICTION & ASSESSMENT OF INVASIVES Moderator: Ellen Jacquart
3:30	Using morphological characteristics to distinguish invasive introduced genotypes of <i>Phragmites australis</i> from native North	Eliminating and harvesting black locust from your forest. <i>Juris Repsa</i>	Assessing the invasive plant species threat in Indiana. Ellen M. Jacquart
4:00	American genotypes.  Bernd Blossey	Incorporating invasive species in forestry planning and practice on private lands.  Fred Clark	Prioritizing invasive plants for management. <i>Miles Falck</i>
4.30	Phragmites australis: a native invasive species in Lake Superior wetlands?	North central woodland invasive species	Development of the IPAW working list of the invasive plants of Wisconsin.
4:30	Elizabeth A. Lynch	survey. Christopher W. Evans	James A. Reinartz

ROOM →	Meeting Room K	Meeting Rooms L-M	Meeting Room N	
TIME ↓	STATE NATURAL AREA PROGRAMS Moderator: Michael Scott	FIRE FORUM Moderator: Rich Henderson	RARE PLANT CONSERVATION  Moderator: Darcy Kind	
8:00	Wisconsin's State Natural Areas Program: origins and early development. Susan O. Haswell	Wildland fire in Illinois and adjacent Midwestern states, 1673-1865. William E. McClain	Natural areas and rare species of the Milwaukee County Park system: ther more to this sense of place than been bikes. Daniel R. Spuhler	e's
8:30	Status of state natural area programs. Richard Thom	Fire and community structure: 25 years of change in a Great Lakes pine forest.  Alan Haney	The influence of population size and density on pollinator service in Agaliskinneriana (Orobanchaceae). Hannelore Artiomow	
9:00	Wisconsin's State Natural Areas Program: a model? Randy Hoffman	Fire disturbance and vegetation history in the Northern Lake States with emphasis on northern Wisconsin. David J. Mladenoff	Conservation efforts for the Illinois- threatened Agalinis auriculata: how do we know? Brenda Molano-Flores	much
9:30	Break	Break	Break	1:
	FEN AND MEADOW MANAGEMENT Moderator: Evelyn Howell	FIRE FORUM Moderator: Rich Henderson	RARE PLANT CONSERVATION Moderator: Darcy Kind	
10:00	Propagation and restoration of fen orchids. Scott Weber	Determining an appropriate fire frequency to restore and maintain oak savannas in two Ontario provincial parks.  Tracey Etwell	A tale of thistles: one park's conserv of a threatened plant (Cirsium pitch Carolyn S. Rock	
10:30	Mowing and herbicide as aids in fen restoration. <i>Richard Dunbar</i>	Effects of prescribed burning and thinning on groundlayer vegetation in a dry-mesic and dry oak forest in southern Wisconsin. Sarah M. Stackpoole	Plants of concern: volunteers monitors species in a regional program (north Illinois). Susanne Masi	or rare east
11:00	Hydrologic alteration, vegetation change and restoration possibilities at Cherokee Fen, Madison WI. <i>Quentin Carpenter</i>	Vegetation response of an Ozark <i>Pinus</i> echinata woodland to prescribed fire and thinning. <i>Brian W. Loges</i>	Private landowners - guardians of biodiversity: Endangered Resources Landowner Contact Program. Darcy D. Kind	
11:30	Lunch	Lunch	Lunch	
	INTERNATIONAL ISSUES Moderator: Abi Rome	EFFECTIVE COMMUNICATION  Moderator: Vickie Larson	PRIVATE LANDS MANAGEMEN Moderator: Darcy Kind	T
1:00	Controlling invasive alien plants in the Cape Peninsula National Park, South Africa. Andrew E. M. Brown	The Honey Creek Project: balancing act. M. Kathleen Sullivan	Panel discussion: Forward to nature: private landowne	
1:30	Sustainable forest management and biodiversity conservation in the rain forest of Misiones Province, Argentina.  Diego Quesada-Allué	Wetlands Reserve Program: management and the relationship between landowner satisfaction, ecological and socioeconomic factors. <i>Ken Forshay</i>	managing land for natural diversity. Private landowners interested in the and animal communities that inhabit property approach land management	plant t their
2:00	Implementation of South Africa's river health programme in the unique river systems of the Cape Floral Kingdom.  Wietsche Roets	University Wild: a video tour of the campus natural areas at the University of Wisconsin-Madison. Tom Sinclair	differing perspectives and with a wid range of resources and knowledge. Landowners: Penelope and Gary Shackelford and John Van Altena	de
2:30		People, plants and Table Mountain: the social impacts of managing invasive alien plants in the Cape Peninsula National Park, South Africa. Andrew E. M Brown	Land Managers: Jesse Bennett, Ron Martin, and Jae Maxfield	
3:00		Break		
		INVASIVE PLANTS - CONTRIBUTED PAPERS Moderator: Gretchen Meyer		
3:30		A strategic approach for managing invasive plant species at nature reserves.  Alan T. Carpenter		
4:00		Public/private partnerships to fight invasive species. Mary Maguire Lerman		
4:30		Does escape from natural enemies contribute to invasiveness of introduced plants? A test with Solidago gigantea. Gretchen Meyer		

ROOM →	Meeting Room O	Meeting Rooms P-Q	Machine Barre B
TIME	TOOLS FOR INVASIVE PLANT CONTROL	ETHICS FOR A SMALL PLANET WORKSHOP	Meeting Room R
1	Coordinator: Tom Boos	Moderator: Jane Elder	INVERTEBRATE DIVERSITY  Moderator: Susan Borkin
8:00	Tools for managing, controlling, and eliminating invasive plants will be on display all day. The display includes new,	Ethics for a Small Planet Workshop: Communicating the Ethical and Theological	Terrestrial invertebrates associated with Phragmites australis and Typha latifolia in three wetlands along Green Bay, Lake
8:30	innovative, commercially available tools as well as homemade devices. Tools will be accessible for hands-on examination.  Information on purchasing tools and	Reasons for Protecting Biodiversity.  A presentation for environmental advocates who are interested in better	The ecology of <i>Tachysphex pechumani</i> , a rare sand-dwelling parasitoid wasp. <i>Erin K. Moan</i>
9:00	constructing your own will be available.	communicating about the ethical foundations for protecting biodiversity.	Parasites of snails as indicators of estuarine bird communities.  Kevin D. Lafferty
9:30		Break	Break
		LAND ETHICS INTERPRETED  Moderator: Charlie Nilon	VERTEBRATE CONSERVATION  Moderator: Jeff Tracey
10:00		Ecological extension projects: a practical way to develop a local land ethic.  Brian W. Pruka	Breeding by snowy plovers following protection from human disturbance. C. P. Sandoval
10:30		Developing a land ethic in students by restoring prairies, woodlands, and wetlands on Wisconsin schoolyards.  Todd F. Miller	Using analysis and modeling of mammalian carnivore movement to assess landscape connectivity in the southern California ecoregion. Jeff Tracey
11:00		Collecting memories as a tool for developing a sense of place.  Susan C. Gilchrist	Habitat selection of grassland birds in northwest Illinois: effects of plant diversity, vegetation structure, and landscape variables. Dan Wenny
11:30		Lunch	Lunch
		LAND ETHICS INTERPRETED  Moderator: Rebecca Schroeder	NATURAL AREA RESTORATION Moderator: Mark Martin
1:00		Wildlife need habitat off limits to humans! Michael J. Vandeman	Wetland restoration under the Wetlands Reserve Program (WRP) in Wisconsin. Emily C. Steel
1:30		Preserving natural sounds in National Parks. <i>Richard D. Horonjeff</i>	Ecological reclamation of a sand mine at Grand Mere State Park in southwest Michigan. Glenn R. Palmgren
2:00		Preserving the history of the land: the interface of cultural and natural history in natural lands management.  Robert P. Nurre	Not just a pretty face redux: utilizing native plants for erosion control on shaded slopes. Daniel R. Spuhler
2:30			Management strategies for protecting natural areas within developing urban environments. William W. Stoll
3:00		Break	
		AQUATIC EXOTIC PLANT ID WORKSHOP Coordinators: Laura Herman & Deb Konkel	
3:30		Aquatic exotic plant identification	
		vorkshop. This a 90-minute hands-on vorkshop to identify aquatic exotic plants	
4:00	i	vill cover aquatic exotics that currently nfest waters in the Great Lakes region as well as others that on their way here.	
4:30			
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### **Poster Presentations**

# Wednesday, September 24 - Thursday, September 25

#### **Capitol Promenade**

- The University of Wisconsin-Stevens Point's Robert W. Freckmann Herbarium website. Merel Black
- NPS National Natural Landmarks in the Midwest region. Janet Eckhoff
- Coastal wetlands web pages to assist conservation planning for Wisconsin. Drew Feldkirchner, Eric Epstein, Elizabeth Spencer, Andy Paulios, and Lena Arvola
- Identifying significant ecological sites: harnessing the local knowledge of biodiversity. Andrew P. Galvin
- Using cattle to restore oak savanna/woodland in southern Wisconsin. Janet Hedtcke and Josh Posner
- Effects of human activity on bird distribution in an Illinois nature preserve. Vicki Hedrick and Paul E. Brunkow
- Connecting education with applied conservation practices: an intern program. Lara Jefferson, Bianca Rosenbaum, and Kay Havens
- Prioritizing invasive species.\* Terri S. Killeffer
- Thirty years of community change in an Illinois old growth forest.\* Ian P. Kirwan and Anton G. Endress
- Breeding bird community responses to a small shrubland-to-prairie restoration. Thomas V. Lerczak
- Establishment and persistence of prairie species at varying seeding densities. Amy Martin, John Harrington, and Steve Swenson
- Management of white-tailed deer herbivory at UWM Field Station. Heather O'Brien and Gretchen Meyer
- Evaluation of prescribed fire and forest harvest as woodland restoration tools in the Lower Missouri Ozarks. Rhonda L. Rimer
- Progress report for the Prairie Invertebrate Biodiversity Inventory: work in Wisconsin. Scott B. Sauer, Eric D. Maurer, Richard A. Henderson, and Richard A. Bautz
- Off-road vehicles as dispersal agents for exotic species in a forested landscape.\* Tom Rooney
- Nonrandom patterns of plant distribution in Illinois forests with respect to site conservation value and tree basal area.
   Greg Spyreas, Jeffrey W. Matthews, Connie Carroll, and James Ellis
  - \* Also presented Saturday

## Saturday, September 27

#### **Capitol Promenade**

- Mapping and modeling the current and potential distributions of invasive plants from China. Thomas Albright, Qinfeng Guo, Susan Price, and Zhilaing Zhu
- Landscape-scale invasive brush removal at Green River State Wildlife Area. R. Todd Bittner
- An evaluation of herbivorous insect performance on native (US) and introduced (European) Solidago gigantea. Robert Clare and Gretchen Meyer
- Assessment of the herbaceous community and presence of Alliaria petiolata at Collins Woods. Peter J. Frank and Anton G. Endress
- Morphology and plant communities of *Alliaria petiolata* in native and invaded habitats. *Elizabeth Gault* and *Robert Wiedenmann*
- Invasion of Norway maple into Mackinac Island State Park. Jennifer Griggs, Steven R. Wangen, and Christopher Webster
- The Center for Exotic Species at Michigan Technological University. Jordan M. Marshall and Andrew J. Storer
- First graders assess the impacts of garlic mustard on native plants. Liana Kearns McClintock, Paisley Koch, Maya Banks, Carina Vargas-Nunez, et. al., and Kelly Kearns
- The use of corn gluten to prevent garlic mustard germination. Jason P. Moser
- Biological control of purple loosestrife in Illinois. Susan L. Post, Robert N. Wiedenmann, Charles G. Helm, David J. Voegtlin, Michael R. Jeffords and Dylan Maddox
- Determining the feasibility of prescribed burning to affect the bud bank of reed canary grass (*Phalaris arundinacea* L.) populations. *Chris Reyes* and *Paul H. Zedler*
- Invasion and displacement of native vegetation by common buckthorn: toward a mechanistic understanding.
   J. Winkelmann, G. Meyer, J. Reinartz, and S. Schnitzer

Announcing the

## 31<sup>st</sup> Natural Areas Conference

Emerging Issues: Possibilities and Perils

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