

**24TH ANNUAL
NATURAL AREAS ASSOCIATION
CONFERENCE
AND
EXOTIC PEST PLANT COUNCIL
CONFERENCE**

(Pacific NW, California, Florida, Tennessee Councils)

***Bridging Natural and
Social Landscapes***



Original Artwork by Margaret Herring

**August 27 - 30, 1997
Doubletree - Lloyd Center
Hotel and Conference Center
(formerly Red Lion Hotel)
Portland, Oregon**

**CONFERENCE
PACKET**

HOSTS

**Natural Areas Association
Exotic Pest Plant Council**

SPONSORS

- ▶ U.S.D.A. Forest Service
- ▶ People & Natural Resources
Research Program
- ▶ Bureau of Land Management
- ▶ National Park Service
- ▶ Environmental Protection
Agency
- ▶ U.S. Fish & Wildlife Service
- ▶ U.S. Army
- ▶ Washington Department of
Natural Resources
- ▶ The Nature Conservancy
of Washington
- ▶ The Nature Conservancy
of Oregon
- ▶ Monsanto
- ▶ Pacific NW Exotic Pest Plant
Council
- ▶ California Exotic Pest Plant
Council
- ▶ Florida Exotic Pest Plant Council
- ▶ Tennessee Exotic Pest Plant
Council
- ▶ Trust for Mutual Understanding
- ▶ International Paper
- ▶ Rocky Mountain Elk Foundation
- ▶ Xerces Society
- ▶ Berry Botanic Garden
- ▶ Native Plant Society
of Oregon

CONFERENCE PLANNING COMMITTEE

Conference Chair

Reid Schuller
Natural Areas Association
Bend, Oregon

Conference Coordinator

Kathleen Bergquist
The Connor Group
Beaverton, Oregon

Program Co-Chairs

Reed Noss
Society for Conservation Biology
Corvallis, Oregon

Sarah Greene
Forest Service-Pacific Northwest Research Station
Corvallis, Oregon

Fundraising

Curt Soper
The Nature Conservancy
Seattle, Washington

Field Trips

Mark Sheehan
Washington Dept of Natural Resources
Olympia, Washington

Pre-Conference Field Trip

Art McKee
Forest Service-Andrews Experimental Forest
Blue River, Oregon

Exhibits and Posters

Ted Thomas
US Fish & Wildlife Service
Olympia, Washington

Raffle and Auction

Nancy Wogen
Bureau of Land Management
Eugene, Oregon

Special thanks to:

The Nature Conservancy, Portland, Oregon for volunteers
Jill Kennay, Natural Lands Institute, Rockford, Illinois for mailing and printing assistance

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

WELCOME

August 27-30, 1997 • Portland, Oregon

WELCOME TO THE PACIFIC NORTHWEST!

Oregon and Washington are pleased to be hosting the first-ever joint conference of the Natural Areas Association and the Exotic Pest Plant Councils of the Pacific Northwest, California, Florida and Tennessee. We have brought together speakers from across the United States and Canada in addition to invited speakers from Russia and Australia.

The conference theme, *Bridging Natural and Social Landscapes*, will emphasize the linkage between human activities and the natural world. We will examine how the imprint of human culture has and continues to shape wildlands, and our conception of what is "natural". We plan to examine the myriad ways that human activities influence ecological conditions and processes, both in designated natural areas and in other wildland environments.

Our keynote speaker, plenary session speakers, and banquet speaker represent a broad range of expertise and perspectives, which we hope will be provocative and encourage discussion and re-examination of "hallowed truths".

To counterbalance our largely cerebral undertakings, we have scheduled twelve half-day or full-day field trips. We think each trip will be both enjoyable and thought-provoking. Field trips have always been a good informal way for conference participants to get to know each other better and to form lasting professional relationships. I encourage you, no, **challenge** you, to form some new contacts at the conference and on the field trips.

Conference visitors will also have the opportunity to take advantage of a wide range of activities in the Portland area. In addition to ready access to hiking and nature observation areas, regional parks, scenic areas, refuges, and wilderness areas, you might try visiting the Portland Rose Gardens, the Metro Washington Park Zoo, the Japanese Gardens, the Oregon Museum of Science and Industry, the World Forestry Center, the Portland Art Museum, or the numerous fine eating establishments and microbrew pubs in the Portland area.

Enjoy your visit!

Reid Schuller
Executive Director
Natural Areas Association

Wednesday Afternoon - Keynote Address

The Cultural in Natural Landscapes by William Robbins
Oregon State University Distinguished Professor of History

Thursday Evening - Banquet Speaker

Can We Save the West? by Felice Pace
Klamath Forest Alliance

Thursday Evening - Presentation of the George B. Fell Award

Presented to Dr. Robert E. Frenkel, Professor Emeritus
Department of Geosciences, Oregon State University

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

AGENDA

August 27-30, 1997 • Portland, Oregon

WEDNESDAY, AUGUST 27, 1997

- 9:00 am - 5:00 pm Registration (Ballroom lobby)
9:00 am - 10:00 pm Vendors (Hawthorne/Sellwood)
Posters (Broadway/Weidler/Halsey)
Noon - 1:00 pm Lunch (on your own)
1:00 pm - 5:00 pm Keynote Speaker and Plenary Session
(Multnomah/Holladay)
- Introduction** **Harry Tyler, Jr.**
President, Natural Areas Association
Augusta, Maine
- Maitland Sharpe**
Asst. Director, Renewable Resources
& Planning
Bureau of Land Management
Washington, DC
- Keynote Address** **The Cultural in Natural Landscapes**
William Robbins
OSU Distinguished Professor of History
Oregon State University, Corvallis, Oregon
- Plenary Speakers** **Is Wilderness a Social Construct?**
Holmes Rolston III
Professor, Department of Philosophy
Colorado State University
Ft. Collins, Colorado
- The Ecological Importance of Natural Areas**
Steve Trombulak
Chair, Department of Biology
Middlebury College, Middlebury, Vermont
- Nature Preserves in an Era of Virtual Reality**
Deborah Jensen
Vice President for Science
The Nature Conservancy, Arlington, Virginia
- Obtaining, Retaining and Maintaining Protected Areas: Biological vs. Social Strategies - What Works Best?**
R. Gerald Wright
Leader, USGS Cooperative Fish & Wildlife Research Unit
University of Idaho, Moscow, Idaho
- Practical Nature Reserve Design and Implementation**
Dave Foreman
Chair, The Wildlands Project
Albuquerque, New Mexico
- 5:00 pm - 7:30 pm Dinner (on your own)
6:00 pm - 7:00 pm NAA Membership Meeting (Morrison)
7:30 pm - 10:00 pm Outdoor Reception (Courtyard)

THURSDAY, AUGUST 28, 1997

- 7:00 am - 8:00 am Continental Breakfast (Ballroom lobby)
7:00 am - 5:00 pm Registration (Ballroom lobby)
8:00 am - 10:00 pm Vendors (Hawthorne/Sellwood)
Posters (Broadway/Weidler/Halsey)
8:30 am - Noon Concurrent Sessions and Symposia (see schedule on pages 4 - 11)
Noon - 1:30 pm Lunch (on your own)
1:30 pm - 5:00 pm Concurrent Sessions and Symposia (see scheduled on page 4 - 11)
3:00 pm - 5:30 pm Official Poster Session
(Broadway/Weidler/Halsey)
6:00 pm - 8:30 pm Banquet (Multnomah/Holladay)
National Park Service Awards
- Banquet Speaker** **Can We Save the West?**
Felice Pace
Executive Director
Klamath Forest Alliance, Etna, California
George B. Fell Award
Raffle / Silent Auction

FRIDAY, AUGUST 29, 1997

- 6:00 am - 7:00 am Continental Breakfast (Ballroom lobby)
6:00 am - 5:00 pm Registration (Ballroom lobby)
7:00 am - 5:00 pm Field Trips (see pages 12 - 14 for descriptions)
8:00 am - 10:00 pm Vendors (Hawthorne/Sellwood)
Posters (Broadway/Weidler/Halsey)
5:00 pm Dinner (on your own)

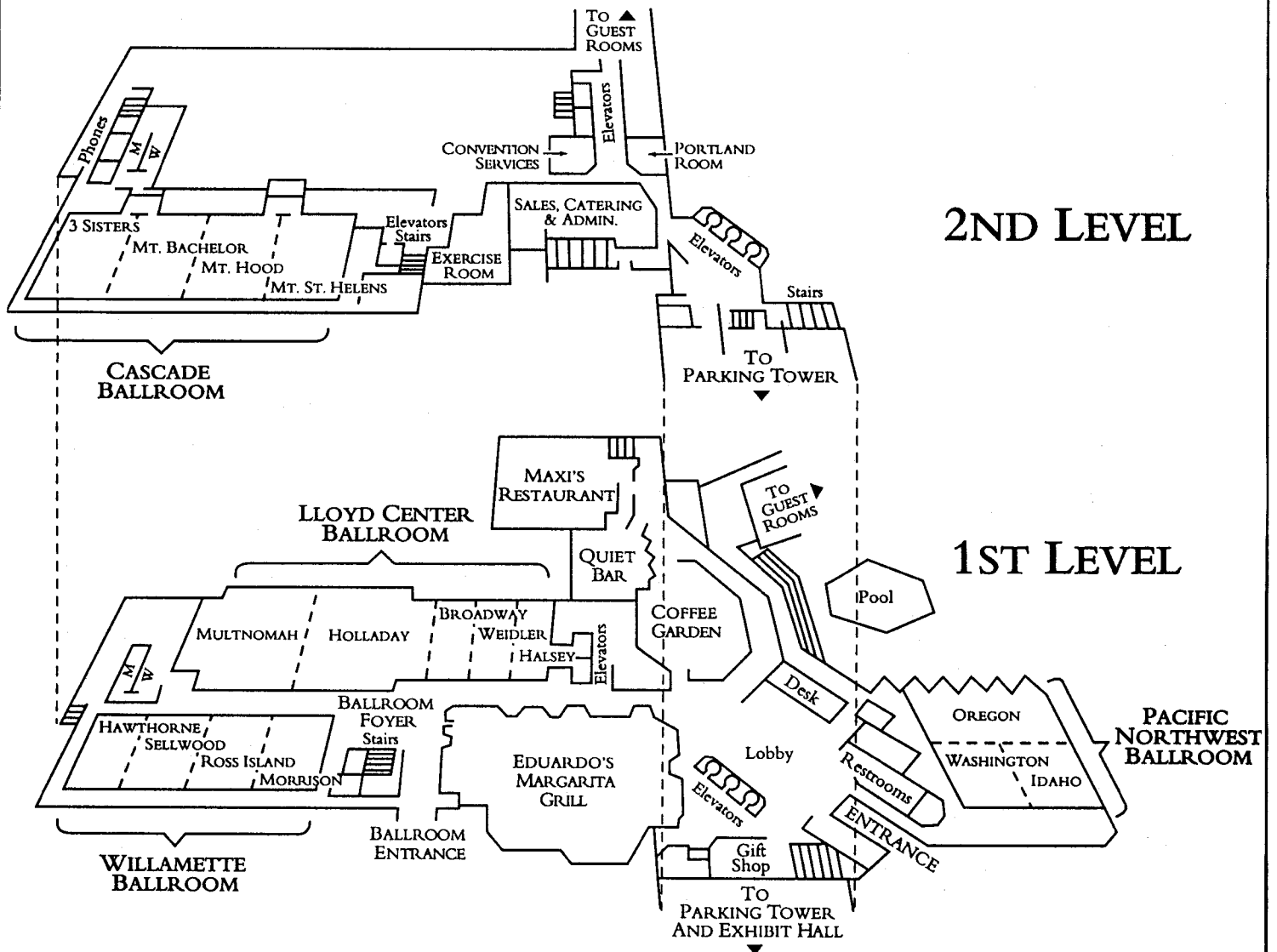
SATURDAY, AUGUST 30, 1997

- 7:00 am - 8:00 am Continental Breakfast (Ballroom lobby)
7:00 am - 1:00 pm Registration (Ballroom lobby)
8:00 am - 5:00 pm Vendors (Hawthorne/Sellwood)
Posters (Broadway/Weidler/Halsey)
8:30 am - Noon Concurrent Sessions and Symposia (see schedule on pages 4 - 11)
Noon - 1:30 pm Lunch (on your own)
1:30 pm - 5:00 pm Concurrent Sessions and Symposia (see schedule on pages 4 - 11)
5:00 pm Conference Concludes

24TH ANNUAL NATURAL AREAS CONFERENCE
EXOTIC PEST PLANT COUNCIL CONFERENCE

HOTEL LAYOUT

August 27-30, 1997 • Portland, Oregon



24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

SCHEDULE

August 27-30, 1997 • Portland, Oregon

THURSDAY MORNING, AUGUST 28, 1997 - SYMPOSIUM

(Check times carefully. Times may vary from session to session.)

Morrison Room		Mt Hood Room		Ross Island Room	
Natural Hydrologic Regimes		What is Natural?: An Interdisciplinary Roundtable		International Natural Area Conservation	
Chair:	Brian Richter The Nature Conservancy	Chair:	Mark Brunson Utah State University	Chair:	Hank Tyler Maine State Planning Office
8:30 am	(1) <i>Using Natural Flow Regimes as Templates in Riverine Conservation</i> LeRoy Poff	8:30 am	Introduction Linda Kruger	8:30 am	(10) <i>Natural Areas and Conservation Work in the Belgorod Region of Russia</i> Alexander Shapovalov
		8:40 am	(7) <i>What is Natural?: An Ecological Perspective</i> Peter Landres	9:00 am	(11) <i>The System of Protected Natural Territories in the Khabarovsk Region of the Russian Far East</i> Alexander Kulikov
9:20 am	(2) <i>Western Riparian Systems: Requirements, Alterations, and Fixes</i> Duncan Patten	9:10 am	(8) <i>What is Natural?: A Social Science Perspective</i> Mark Brunson	9:30 am	<i>The System of Natural Conservation Areas in the Kaluga Region of Russia</i> Valeri Novikov
		9:40 am	Roundtable Discussion Linda Kruger		
10:10 am to 10:40 am		Break			
10:40 am	(3) <i>How Much Water Does a River Need?</i> Brian Richter	10:40 am	Roundtable Discussion Linda Kruger	10:40 am	(12) <i>Ecological and Social Functions Influencing Resource Governance</i> David Brunckhorst
11:00 am	(4) <i>Restoration of Riparian Ecosystems on the Truckee River Through Adjusted Releases of Instream Flows</i> Catherine MacDonald	11:10 am	(9) <i>Synthesis: Bridging an Old Gap, Posing New Questions</i> George Stankey	11:05 am	(13) <i>Living with MegaDiversity: Current Australian Approaches for Sustainable Development and Biodiversity Conservation</i> Richard Thackway
11:20 am	(5) <i>Biohydrology of Coastal Plain Ponds</i> Richard McHorney			11:30 am	(14) <i>Achieving Conservation Objectives Within Regional Planning Frameworks: An Australian Perspective</i> Richard Thackway
11:40 am	(6) <i>Restoration of Natural Hydrologic Conditions at the Katharine Ordway Sycan Marsh Preserve, Oregon</i> Catherine Macdonald				
Noon to 1:30 pm		Lunch			

24TH ANNUAL NATURAL AREAS CONFERENCE

EXOTIC PEST PLANT COUNCIL CONFERENCE

August 27-30, 1997 • Portland, Oregon

SCHEDULE

THURSDAY MORNING, AUGUST 28, 1997 - CONCURRENT SESSIONS

Mt Bachelor Room		Three Sisters Room		Mt St Helens Room	
Exotic Species		Rare Species Management		Ecological Implications of Grazing	
Moderator: Lou Whiteaker Bureau of Land Management		Moderator: Cheryl McCaffrey Bureau of Land Management		Moderator: Richard Young The Nature Conservancy	
8:30 am	(15) <i>Management of Melaleuca quinquenervia at Big Cypress National Preserve</i> Antonio Pernas	8:30 am	(24) <i>Monitoring Rare Plant Populations with Quadrats: Should Quadrat Locations be Permanent or Temporary?</i> Daniel Salzer	8:30 am	(33) <i>Semi-Natural Grasslands in Scandinavia: Ecological Values and Conservation Challenges</i> Gunilla Olsson
8:50 am	(16) <i>Predicting the Invasion of Non-Indigenous Plant Species into the Wetland Communities of Everglades National Park</i> Linda Tyson	8:50 am	(25) <i>Population Dynamics of Sarcodes sanguinea: Sixteen Years Amongst the Snow Plants</i> Daniel Luoma	8:50 am	(34) <i>Implications of Cattle Grazing to Management of Natural South Florida Environments</i> Michael Duever
9:10 am	(17) <i>Effects of Hydrologic Restoration on Two Exotic Grasses</i> Peter David	9:10 am	(26) <i>Flowering and Fruiting Response of Asimina tetramera Small Following Resource Management of Mature Sand Pine Scrub in Southeast Florida</i> Anne Cox	9:10 am	(35) <i>Restoration of Improved Pastures in Central Florida to Longleaf Pine/Wiregrass Communities</i> Jean McCollom
9:30 am	(18) <i>Removal of European Beachgrass (Ammophila arenaria) Using a Variety of Methods to Restore Coastal Sand Dunes in Oregon</i> Bruce Rittenhouse	9:30 am	(27) <i>Monitoring and Management of the Rare Plant Calochortus umpquaensis in the Ace Williams Candidate Area of Critical Environmental Concern</i> Russell Holmes	9:30 am	(36) <i>Patterns of Natural Succession Within Subalpine Herblands of the Wasatch Plateau, Great Basin Research Station, Utah</i> Stephen Monsen
9:50 am	(19) <i>A Combination Treatment for the Control of Arundo donax using Mechanical Mulching and Herbicides with a Comparison to the Cut Stump Method</i> Shawna Bautista	9:50 am	(28) <i>Batiquitos Lagoon Enhancement Project: Influence of Ecosystem Modifications on Endangered Species Management and Resource Stewardship</i> Adam Wheelchel	9:50 am	(37) <i>The Tale of Two Jacks Creeks: Redband Trout Abundance in Relation to Stream Temperature</i> Bruce Zoellick
10:10 am to 10:40 am Break					
10:40 am	(20) <i>The Noxious Presence on Willapa Bay</i> Janie Cville	10:40 am	(29) <i>Reestablishment of an Endangered Plant Species at a Southern California Salt Marsh</i> Lorraine Parsons	10:40 am	(38) <i>Microbiotic Soil Crusts in Oregon's Shrub-Steppe</i> Jeanne Ponzetti
11:00 am	(21) <i>Exotic Plant Invasions in Red Butte Canyon Research Natural Area</i> Alyce Hreha	11:00 am	(30) <i>Rare Species Inventory and Land Management on Arnold Air Force Base, Tennessee</i> David Campbell	11:00 am	(39) <i>Meadow Response to Packstock Grazing in Yosemite National Park</i> Peggy Moore
11:20 am	(22) <i>Growth Patterns of an Exotic Species, Hedera helix (English Ivy), in the Pacific Northwest</i> Amanda Durkee	11:20 am	(31) <i>Classification of Panicum abscissum Dominated Natural Communities at Avon Park Air Force Range, Polk and Highlands Counties, Florida</i> Steve Orzell	11:20 am	(40) <i>Vegetation Recover at Simeonof National Landmark, Alaska Maritime National Wildlife Refuge, Alaska</i> Stephen Talbot
11:40 am	(23) <i>Are Plant Invasions Dependent on Stochastic Interactions at the Invaded Site?</i> Sarah Reichard	11:40 am	(32) <i>The Savannah Army Depot: A Case Study of Endangered Species Identification and Management Leading to the Protection of a Natural Area Via the BRAC Process</i> Randy Nyboer	11:40 am	(41) <i>Application of a State and Transition Model for Managing Shrub-Grasslands of Southeastern Arizona</i> Richard Young
Noon to 1:30 pm Lunch					

24TH ANNUAL NATURAL AREAS CONFERENCE

EXOTIC PEST PLANT COUNCIL CONFERENCE

SCHEDULE

August 27-30, 1997 • Portland, Oregon

THURSDAY AFTERNOON, AUGUST 28, 1997 - SYMPOSIUM

(Check times carefully. Times may vary from session to session.)

Morrison Room	Mt Hood Room	Ross Island Room
Urban Natural Area Protection and Management Chair: Mike Houck Audubon Society of Portland	Native American Perspectives on Natural Area Management Chair: Richard Hanes Bureau of Land Management	Status Report on State Natural Area Programs and Roundtable Discussion Chair: Robert McCance Kentucky Nature Preserves Commission
1:30 pm (42) <i>Panel: Landscape Ecology and Regional Land Use Patterns: People, Policies and Partnerships</i> David Ausherman Dean Apostol Mike Houck Jim Desmond Rosemary Furfey Jill Gillen Mark Wilson	1:30 pm <i>Introduction</i> Richard Hanes 1:40 pm (43) <i>Native American Oral Tradition as a Natural Knowledge System in Environmental Relationships</i> Tom Biron 2:00 pm (44) <i>From a Native Perspective: There is No Such Thing as "Wilderness"</i> Lehua Lopez	1:30 pm <i>Introduction</i> Robert McCance 1:45 pm <i>NAA Survey of State Statuses: What's Happening?</i> Robert McCance 2:00 pm <i>Case Studies: States with Recent Significant Changes</i> Matt Chew
2:40 pm <i>Questions and Answers</i>	2:20 pm (45) <i>Anthropological Perspectives on Native American Sacred Geography</i> Deward Walker	2:30 pm <i>General Discussion on Causes and Cures</i> Group Discussion
2:50 pm <i>Introduction to Second Panel Topic</i>	2:40 am (46) <i>Hopi Wetlands</i> Beverly Suderman	
3:10 am to 3:40 am Break		
3:40 am (42) <i>Panel: Natural Area Maintenance and Management: Public Land, Limited Funds, Creative Solutions and Frustrations</i> George Kral Steve Bricker Jim Morgan Catherine Macdonald Esther Lev	3:40 am (47) <i>Indigenous Knowledge and Natural Area Management</i> Adeline Fredin 4:00 pm (48) <i>Management of Natural Area Preserves and Natural Resource Conservation Areas in the State of Washington</i> Jim Peters 4:20 am (49) <i>Federal Management of Natural Areas on Ceded Lands</i> Lucile Housley	3:40 pm <i>Model State Nature Preserves Act and What It Can Do: The Midwest Experience</i> Group Discussion 4:15 pm <i>How Do We Improve? Advice for Creating Good State Natural Area Programs</i> Roundtable Discussion with State Program Directors
4:45 pm <i>Questions and Answers</i>	4:40 pm (50) <i>Issues and Opportunities Facing Coquille Indian Tribe Land Use Planning</i> Don Ivy	

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

August 27-30, 1997 • Portland, Oregon

SCHEDULE

THURSDAY AFTERNOON, AUGUST 28, 1997 - CONCURRENT SESSIONS

Mt Bachelor Room

Exotic Species

Moderator: Lou Whiteaker
Bureau of Land Management

1:30 pm (51) *Overzealous Exotic Species Control as a Threat to Rare Species*
Linda Conway Duever

1:50 pm (52) *A Partnership for Managing Invasive Plants in New York State*
Pamela Otis

2:10 pm (53) *An Integrated Approach for the Control of Cogongrass*
Eric Johnson

Three Sisters Room

Rare Species Management

Moderator: Cheryl McCaffrey
Bureau of Land Management

1:30 pm (54) *Protection of Bacopa rotundifolia (water hyssop) from Illegal Off-Road Vehicle and Horse Traffic on the Hoosier National Forest*
Ellen Jacquart

1:50 pm (55) *Management for the Rare Butterfly Speyeria zerene hippolyta (Oregon silverspot butterfly) at The Nature Conservancy's Cascade Head Preserve*
Debbie Pickering

2:10 pm (56) *The Rehabilitation and Reintroduction of Captive Spectacled Bears into the Maquipucuna Reserve, Ecuador*
Abigail Rome

Mt St Helens Room

Social and Natural Interface

Moderator: Cindy McCain
US Forest Service

1:30 pm (61) *Spatial Aspects of the Post-Soviet Expansion of the Russian Nature Reserve (zapovedniki) System*
Philip Pryde

1:50 pm (62) *Honduras Partnership for Biodiversity*
Eric Greenquist

2:10 pm (63) *California Roadsides: A New Perspective*
Chris Elliott

2:30 pm (64) *The Social and Political Viability of Biological Corridors on Private Lands: A Case Study in Lewis & Clark County, Montana*
Seth Wilson

2:50 pm (65) *Effects of Local Conservation Zoning on Residential Property Values in Portland, Oregon: A Preliminary Survey*
Tim Brooks

3:10 pm to 3:40 pm

Break

Fresh Water Ecosystems

Moderator: Duncan Patten
Arizona State University

3:40 pm (57) *Maine's Lakes and Ponds*
Hank Tyler

4:00 pm (58) *Does a Drawdown Period Influence Nest Predation?*
Michelle Grigore

4:20 pm (59) *Restoration of a Freshwater Coastal Marsh: Effects on Avian Use*
Michelle Grigore

4:40 pm (60) *A Survey of Algae and Invertebrates Associated with Borax Lake, a Natural Hotspring Lake in the Great Basin of Southeastern Oregon*
Joseph Furnish

3:40 pm (66) *The Changing Cultural Construct of Natural Areas: A View from Australia and New Zealand*
Michael Hall

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

SCHEDULE

August 27-30, 1997 • Portland, Oregon

SATURDAY MORNING, AUGUST 30, 1997 - SYMPOSIUM

(Check times carefully. Times may vary from session to session.)

Morrison Room

Natural Areas and Ecosystem Management

Chair: Janet Ohmann
US Forest Service

8:30 am (67) *Reconciling Ecosystem Management with the Rest of Conservation*

Reed Noss

9:00 am (68) *Implications of Changing Social and Ecological Values in Managing Wilderness*

Peter Landres

9:30 am (69) *Adapting Ecosystem Management Strategies to People and Places: Case Studies from Three Temperate Rainforest Ecosystems*

Peter Schoonmaker

Mt Hood Room

Exotics in the Landscape

Chair: Carla Bossard Moderator: Sarah Reichard
St Mary's College University of Washington

8:30 am (73) *Impacts of Invasive Plants on Western Wildlands*

Jerry Asher

8:55 am (74) *Wildlife as Weeds: A Review*

Jeffrey Lovich

9:20 am (75) *Ecological and Economic Consequences of Imperata cylindrica (cogongrass) Invasion in Southeastern Sandhill*

Carol Lippincott

9:45 am (76) *Ecology and Management of Melaleuca quinquenervia, an Invader of Florida Wetlands*

Ted Center

10:10 am to 10:40 am Break

10:40 am (70) *Putting Natural Areas into Ecosystem Management and Ecosystem Management into Natural Areas*

Catherine Macdonald

10:40 am (77) *Biological Control of Exotic Weeds in Wildlands*

Michael Pitcairn

11:00 am (71) *Monitoring: A View from Within the National Forest System*

Thomas Atzet

11:00 am (78) *Using Traits of Invaders to Predict Invasive Woody Plant Establishment*

Sarah Reichard

11:30 am (72) *Why Aren't RNAs an Integral Part of Ecosystem Management?*

Lucy Tyrrell

11:25 am (79) *Seeking Common Ground: The Nursery Industry's Emerging Views on Invasives*

Craig Regelbrugge

Noon to 1:30 pm Lunch

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

SCHEDULE

August 27-30, 1997 • Portland, Oregon

SATURDAY MORNING, AUGUST 30, 1997 - CONCURRENT SESSIONS

Mt Bachelor Room		Three Sisters Room		Mt St Helens Room	
Forest Ecosystems		Interpretation and Education in the Natural World		Fire: Ecology, Public Perspectives and Use	
Moderator: Steve Caicco US Fish & Wildlife Service		Moderator: Lee Taylor National Park Service		Moderator: Peter Dunwiddie The Nature Conservancy	
8:30 am (80)	Local Wisdom Integrated with Traditional Research for Effective Resource Management Shandra Fitzpatrick	8:30 am (89)	Research Lands in the Western Untied States Lisa Harrington	8:30 am (98)	Burning Common Ground - Agreeing About Fire Maret Pajutee
8:50 am (81)	Corvid Densities and Nest Predation in Rural Versus Wild Forest David Craig	8:50 am (90)	Telling Stories: Providing For Other Voices to be Heard in Heritage Interpretation and Marketing Michael Hall	8:50 am (99)	The Use of Prescribed Burning as a Restoration Process: Lessons from Santa Cruz Island, California Robert Klinger
9:10 am (82)	Impacts of Exotic Forest Insects and Diseases at Great Smoky Mountains National Park Kristine Johnson	9:10 am (91)	Red Butte Canyon Research Natural Area: The Last Ungrazed Watershed in the Intermountain West Barbara Bentley	9:10 am (100)	Comparison of Historic and Post-1900 Fire Occurrence in the Columbia River Basin Stephen Barrett
9:30 am (83)	Long-Term Monitoring of Wild Edible Mushrooms in the Forest of the Pacific Northwest David Pilz	9:30 am (92)	Descriptive Analysis of the Pine Dunes Research Natural Area Julie Anne Hamon	9:30 am (101)	Fire History and Fire Regimes of East Humbug and Scorpion Creeks and Their Relation to the Range of <i>Pinus lambertiana</i> Douglas Edward Garza
9:50 am (84)	The Ecosystem Consequences of Fragmentation: Biogeochemical Cycling at Oldgrowth Forest-Clearcut Edges in the Pacific Northwest Tom Hayes	9:50 am (93)	Prairies in Portland? Mark Wilson	9:50 am (102)	Prescribed Burning in the Urban Environment David Borneman
10:10 am to 10:40 am Break					
10:40 am (85)	Effects of Timber Harvest on <i>Cimicifuga elata</i> , a Rare Plant of Northwestern Forests Thomas Kaye	10:40 am (94)	Local Opposition to a Natural Area Preserve: Lessons Learned from the Elk River, Washington Janice Friebaum	10:40 am (103)	Response of <i>Festuca idahoensis</i> Grassland to Prescribed Burning in the San Juan Islands, Washington Peter Dunwiddie
11:00 am (86)	Vertical and Seasonal Variation in Arthropod Communities in Canopies of Four Conifer Species in an Oldgrowth Conifer Forest in Southwestern Washington Thomas Schowalter	11:00 am (95)	Coles Levee Ecosystem Preserve Environmental Education Program Stephen Geddes		
11:20 am (87)	Forestland Protection and Acquisition within the City of Tigard, Oregon Michael Reichenbach	11:20 am (96)	Dinosaurs in our Midst: A Cultural Analysis of the Construction and Preservation of Natural Areas Susan Hornshaw		
11:40 am (88)	Mapping Presettlement Vegetation of the Willamette Valley, Oregon, Using General Land Office Survey Data Edward Alverson	11:40 am (97)	The Use of Part Images to Evoke Perception of a Whole Entity Susan Hornshaw		
Noon to 1:30 pm Lunch					

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

SCHEDULE

August 27-30, 1997 • Portland, Oregon

SATURDAY AFTERNOON, AUGUST 30, 1997 - SYMPOSIUM

(Check times carefully. Times may vary from session to session.)

Morrison Room

Ecosystem Conservation

Chair: Reed Noss
Society for Conservation Biology

- 1:30 pm** (104) *Introduction*
Reed Noss
- 1:35 pm** (105) *A Conservation Assessment of North American Terrestrial Ecoregions*
David Olson
- 2:00 pm** *The US Gap Analysis: A Status Report*
Michael Scott
- 2:25 pm** (106) *Conserving Canada's Ecosystems Through the Endangered Spaces Campaign*
Arlin Hackman
- 2:50 pm** *The Nature Conservancy's Ecoregional Conservation Strategy*
Kent Redford

Mt Hood Room

New and Increasing Uses of Native Species

Chair: Richard Hansis
Washington State University

- 1:30 pm** (110) *Historical Overview of Non-Timber Forest Products in the United States*
Shandra Fitzpatrick
- 1:45 pm** (110) *Recent Trends in Non-Timber Forest Products*
Rebecca McLain
- 2:00 pm** (110) *Measuring Biological Sustainability*
David Pilz
- 2:15 pm** (110) *Gather Knowledge and Stewardship Practices*
Thomas Love
- 2:30 am** (110) *Ethnicity and Labor Relations*
Richard Hansis
- 2:45 pm** *Presenter Panel*

3:10 am to 3:40 am Break

- 3:40 pm** (107) *Ecosystem Conservation: The NCCP Experience in California*
Michael O'Connell
- 3:40 pm** *Panel and Audience Discussion*
- 4:10 pm** (108) *Ecological Integrity in Theory and Practice: Lessons about Attaining Environmental Goals*
James Karr
- 4:35 pm** (109) *Ecosystem Conservation in the Political Landscape*
Mitch Friedman

**24TH ANNUAL NATURAL AREAS CONFERENCE
EXOTIC PEST PLANT COUNCIL CONFERENCE**

SCHEDULE

August 27-30, 1997 • Portland, Oregon

SATURDAY AFTERNOON, AUGUST 30, 1997 - CONCURRENT SESSIONS

Mt Bachelor Room

Forest Ecosystems

Moderator: Steve Caicco
US Fish & Wildlife Service

1:30 pm (111) *A GIS-Based Conservation Plan for the Klamath-Siskiyou
Ecoregion: A Progress Report*
James Strittholt

1:50 pm (112) *Representativeness Assessment of National Forest System
Research Natural Areas in Idaho*
Steven Rust

2:10 pm (113) *Deer Management Techniques Used by the Columbus Metro
Parks*
James Stahl

Three Sisters Room

Interpretation and Education in the Natural World

Moderator: Lee Taylor
National Park Service

1:30 pm (114) *Selection for Natural Features in Irish Pilgrimage Sites*
Susan Bratton

1:50 pm (115) *Hey Kids! Meet the Beetles: Grow Your Own Biodiversity Work
Force*
Maret Pajutee

3:10 pm to 3:40 pm

Break

24TH ANNUAL NATURAL AREAS CONFERENCE EXOTIC PEST PLANT COUNCIL CONFERENCE

FIELD TRIPS

August 27-30, 1997 • Portland, Oregon

CONFERENCE FIELD TRIPS (August 29, 1997)

1. Sandy River Gorge

The Sandy River flows from the Cascade Mountains directly into the Columbia River due east of Portland with the lower reaches of the river lying on the edge of the Willamette Valley and the Columbia River Gorge. The Nature Conservancy and the Bureau of Land Management have designated over 5 river miles of this Wild & Scenic River as natural areas, preserving some of the largest tracts of intact grand fir-western redcedar forest left in the region. In addition to high quality natural communities, the Sandy River still has strong winter steelhead runs. The field trip will explore the BLM Sandy River ACEC and the Conservancy Preserve as well as take time to look at the mouth of the river, which is managed by the Forest Service.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 45 minutes
Difficulty: 3 miles of moderate hiking
Trip Leaders: Cathy MacDonald, Eddie Huckins, Bob Ratcliffe

2. Willamette Valley Natural Areas: Finley National Wildlife Refuge

Explore three Research Natural Areas (RNA) in William L. Finley National Wildlife Refuge located 90 miles south of Portland. Willamette Floodplain RNA was established in 1966 to protect wet prairie landscape typical of the valley during settlement times and requires prescribed burning to maintain the grasslands. We will review the research and management programs on site. Pigeon Butte RNA features Oregon white oak woodland, which is, in the absence of burning, succeeding to a Douglas fir forest. The nearby Maple Knoll RNA features a mesic valley margin mixed conifer forest established after historic logging.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 1 ½ hours
Difficulty: Short hikes on site
Trip Leaders: Bob Frenkel, Maura Naughton

3. Mt. St. Helen's: An Active Volcano and Its Dynamic Ecosystem

Visit the most active volcano in the lower 48 states. The first stop will be Silver Lake Visitor Center for general orientation and a short film/slide presentation. The second stop will be at Harry Gardner Park, near the town of Toutle, to examine mudflow deposits of the 1980 eruption and some spectacular deposits of enormous ancient mudflows. The third stop at the Weyerhaeuser Visitor Center will provide a brief tour of the exhibits, an overview of the debris avalanche deposits and the remnants of an early sediment retention structure. We will take an exciting hike along a portion of the new Hummocks Trail through the deposits of the 1980 debris avalanche, the largest landslide in historic times. We will then visit the new Johnston Ridge Observatory for a bird's eye view of the Mt. St. Helens crater and Lava Dome. Along the way we will see a wide spectrum of natural processes at work, including active landslides, and diverse ecosystem recovery in a volcanic environment.

Maximum Number of People: 60
Length: Full Day
Travel Time One Way: 2 hours
Difficulty: 2 to 3 miles of moderate hiking
Trip Leaders: Pat Pringle, Peter Frenzen

4. Wind River Canopy Crane - Thorton T. Munger Research Natural Area (\$11 additional fee)

Come see the forest **above** the trees! The Wind River Canopy Crane, a canopy access system that is a focal point for a variety of research on the ecology and biology of old growth forest canopies, is located in the Thorton T. Munger Research Natural Area. This 1,180-acre natural area exemplifies an old growth Douglas fir-western hemlock forest. The massive trees, multi-layered canopy structure, and abundant standing and downed woody debris are typical of old forests at low elevations west of the Cascade Crest in Washington and Oregon. This is a prime example of the type of forest that has captured national attention as habitat for the threatened Northern Spotted Owl and stimulated an on-going debate about forest management policies in our National Forests. This trip will feature a ride in the canopy crane, a walking tour of the RNA focusing on old growth forest ecology, and a visit to another site representing another type of western Cascade ecosystem. Not for the fainthearted or those with a fear of heights!

Maximum Number of People: 30
Length: Full Day
Travel Time One Way: 1 ½ hours
Difficulty: 1 to 2 miles of moderate hiking at each site
Trip Leaders: Dave Shaw, Chris Chappell

CONFERENCE FIELD TRIPS (August 29, 1997) (continued)

5. Puget Prairies and Puget Lowland Old Growth Forest

This trip will highlight significant geologic and vegetative features of two Puget prairie landscapes and provide an opportunity to visit a unique Puget Sound lowland old growth forest. Come and marvel at the mystery of "mima mounds" topography and speculate on its origin at the Mima Mounds Natural Area Preserve. This prairie site protects an undisturbed, representative example of mima mound physiography and a high-quality Idaho Fescue dominated grassland community. We'll also visit Glacial Heritage Park which contains examples of mounded prairie, oak woodlands, Douglas fir savannah and riparian areas. Restoration efforts are underway at both sites to reduce invading woody vegetation and control Scot's broom, a European invader of many Puget prairies. We'll discuss the use of prescribed burning, cutting, and native species propagation being used to restore these sites. As a contrast to the open prairie landscape, we'll also visit Lewis and Clark State Park which contains an example of Puget lowland old growth forest dominated by a Douglas fir-western hemlock/swordfern community.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 2 hours
Difficulty: Short, easy hikes at each site
Trip Leaders: Barb Aberle, Birdie Davenport, Patrick Dunn

6. Cascade Head Scenic Research Areas (Oregon Coast)

Cascade Head Scenic Research Areas was established by Congressional legislation in 1973 to protect a unique coastal area that has a combination of diverse, natural features including a headland grassland, old growth spruce forest and a long-standing U.S. Forest Service experimental forest in a highly scenic area of the Oregon Coast. We will have an overview of restoration efforts at the Salmon River estuary followed by a hike at the Cascade Head Preserve, which is managed by The Nature Conservancy. Discussion on the headland ecology will focus on rare silverspot butterfly habitat management and heavy visitation use.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 2 hours
Difficulty: 3 miles of moderate hiking
Trip Leaders: Deb Pickering, Chris McDonald

7. Columbia River Gorge: Exploring Natural and Social Landscapes

Follow in the footsteps of Lewis and Clark and travel the Columbia River as it crosses the Cascade Mountains through a 90-mile long gorge. The Columbia River Gorge links the maritime forests of western Oregon and Washington and the eastern arid shrub steppe in the Cascades rainshadow. Dramatic geological processes such as mountain building, massive lava flows, catastrophic floods, and gigantic landslides have shaped the gorge and created superlative scenery. In 1986, Congress recognized its national significance and established the "Columbia River Gorge National Scenic Area". This field trip will give an overview of the Gorge's complex natural ecosystems. The tour will describe vegetation and geology along both the Washington and Oregon sides of the Gorge. Lunch at Horsethief Lake State Park (in the eastern gorge) will be highlighted by a special tour of outstanding petroglyphs and discussion of early native American presence in the Gorge.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 1 hour
Difficulty: Short, easy to moderate hikes at a number of sites
Trip Leaders: Dr. Rex Crawford, Dr. Marvin Beeson, Russ Jolly

8. Old Growth Pacific Northwest Forest: Cedar Flats RNA

Old growth forests are one of the defining characteristics of the Pacific Northwest and have been at the core of much of the recent environmental and ecological debates in our region. This field trip will examine a large stand of old growth western redcedar-Douglas fir forest located in Cedar Flats RNA on the Gifford Pinchot National Forest. The redcedars range from 90 to 300 cm DBH and reach heights of 60 meters. Cedar Flats RNA was established in 1946 to represent an impressive bottomland forest growing on an old mudflow deposit on the south side of Mt. St. Helen's. Trip leaders will discuss the ecology of the site as well as the ecology of the surrounding area with possible side trips to more recent mudflows.

Maximum Number of People: 40
Length: Full Day
Travel Time One Way: 1 ½ hours
Difficulty: 2 miles of moderate hiking
Trip Leaders: Nancy Diaz, Jim White

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FIELD TRIPS

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CONFERENCE FIELD TRIPS (August 29, 1997) (continued)

9. West Eugene Wetlands Project Area

West Eugene contains some of the largest expanses of wet prairie complex remaining in the southern Willamette Valley. We will view portions of Willow Creek Preserve (TNC), Fern Ridge RNA (U.S. Army Corps of Engineers) and West Eugene Wetland ACEC (BLM) as well as other holdings. The trip will focus on restoration efforts, including prescribed burning, endangered species management and exotic species control, taking place in the midst of residential and industrial development areas. A diverse partnership of public and private organizations, including the U.S. Army Corps of Engineers, Bureau of Land Management, City of Eugene, and the Nature Conservancy are dedicated to preserving and maintaining these areas.

Maximum Number of People:	40
Length:	Full Day
Travel Time One Way:	2 hours
Difficulty:	Short, easy hikes
Trip Leaders:	Ed Alverson, Steve Gordon, Rick Hayes, Nancy Wogen

10. Mt. Hood Alpine Trip: Mt. Hood National Forest

Hike the high country on Mt. Hood (elevation 11,235 feet), Oregon's highest peak and the most heavily recreated area in the state. We will begin at the Mt. Hood Meadows ski area with a discussion of winter recreation and its impacts on the subalpine environment. Our hike will begin at the top of a chairlift run and head generally downslope, encountering subalpine wildflower and great scenery from the top of Oregon. The late summer colors will provide a backdrop for discussion of high elevation ecology, sensitive species management and year-round recreational use of this popular site. Mt. Hood is the second most-climbed peak in the world, after Mt. Fuji in Japan, so recreation is a primary concern in this National Forest. Wilderness management issues on the mountain will also be discussed.

Maximum Number of People:	40
Length:	Full Day
Travel Time One Way:	1 ½ hours
Difficulty:	4 miles of moderate hiking at 6,000 foot elevation
Trip Leaders:	Marty Stein, Molly Sullivan, Susan Nugent

11. Berry Botanic Garden

The Berry Botanic Garden is a small (6-acre), private, non-profit organization located on the grounds of an old estate in the Dunthorpe neighborhood of Portland. Conservation is one of the primary missions of the Garden, which operates an off-site seed bank for rare and endangered plants of the Pacific Northwest. The Garden is a participating institution of the Center for Plant Conservation. The Garden features over 140 species of Rhododendron and has an alpine garden. The field trip will feature short guided tours of the grounds, a tour of the conservation facilities, and ample time to explore the Garden on your own.

Maximum Number of People:	20
Length:	Half Day (morning)
Travel Time One Way:	30 minutes
Difficulty:	Easy garden strolls
Trip Leaders:	Ed Guerrant, Janice Dodd

12. Metropolitan Greenspaces Tour: Metro Regional Parks & Greenspaces

This field trip will provide an overview of the Metropolitan Greenspaces Program coupled with a tour to Smith and Bybee Lakes, a 2,000-acre urban wetland wildlife area in North Portland. Habitat enhancement activities, including exotic plant species control, water level manipulation and recreational opportunities will be viewed and discussed. We will also visit Oaks Bottom, Portland's first official wildlife protection area, and the Springwater Corridor, a 16½-mile "rails to trails" project that links people to the urban outdoors.

Maximum Number of People:	20
Length:	Half Day (afternoon)
Travel Time One Way:	1 hour total
Difficulty:	Short, easy hikes
Trip Leaders:	Ron Klein, Emily Roth, Mike Houck

FIRST ANNOUNCEMENT
1998 NATURAL AREAS CONFERENCE

"Planning for the Seventh Generation"

October 6 - 10, 1998
The Upper Great Lakes Region
Mackinac Island, Michigan
Mission Point Resort

Board Meeting -- October 5, 1998
Pre-Conference Field Trips -- October 3 - 5, 1998
Post-Conference Events -- October 10 - 11, 1998

The Natural Areas Association is inviting you to a Silver Anniversary Celebration. In 1998, NAA's 25th Annual Conference is on Mackinac Island - in view of the Mackinac Bridge connecting Michigan's Upper and Lower Peninsulas and located between Lakes Michigan and Huron. Native People have known the Island as Michilimackinac or "great turtle". It is a sacred place. The Island was important to the French, English, and finally, the Americans for fur trading, as a military post, and a tourist location. The Island is rich in legend, lore, colonial and natural history.

We will come together on what was historically the country's second National Park and first State Park to consider the actions we may and perhaps must take now to be *"Planning for the Seventh Generation"*. This theme reflects the anticipated participation of Native Peoples representing several Great Lakes and other tribes. Primary topics will include a discussion on the past, present, and future of natural areas and the role of natural areas in conservation planning and sustainable development. The Mackinac Straits area, chosen both for its aesthetics and its location between two of the Great Lakes, epitomizes shoreline and island development pressures which threaten ecologically and globally significant natural communities and species, yet offers opportunities for innovations such as ecotourism. The conference will showcase for an international audience, conservation efforts of highly successful land trusts including the Little Traverse Conservancy and The Nature Conservancy.

Outstanding field trips to nearby natural areas will feature the coasts of Lake Superior, Lake Huron, and Lake Michigan with Great Lakes marshes, interdunal wetlands, fresh water sand dunes, and limestone bedrock communities as well as providing an opportunity to visit inland natural communities with old growth hemlock, pine and hardwood forests, water falls and rivers, bogs, fens, peatlands, sink holes, and Jack pine savannas. You may experience fall hawk, song bird and waterfowl migrations, colonial birds, the northern home of the Kirtland's warbler and piping plover along with Great Lakes endemic plants, black bear, deer, elk, and wolves. The area offers abundant opportunities for viewing the glorious fall color, photography, light and strenuous hiking, canoeing, kayaking and scenic boat or train rides.

For More Information:

Address:

Great Lakes Natural Areas Conference
PO Box 30180
Lansing, MI 48909-7680

Web Site:

wildlife.dnr.state.mi.us/HomePages/Meetings/Natural_Areas_1998

NAA Members:

NAA members will automatically receive all Great Lakes Natural Areas Conference information and announcements.

