



US - IALE

US-IALE 2008 Annual Symposium

TABLE OF CONTENTS

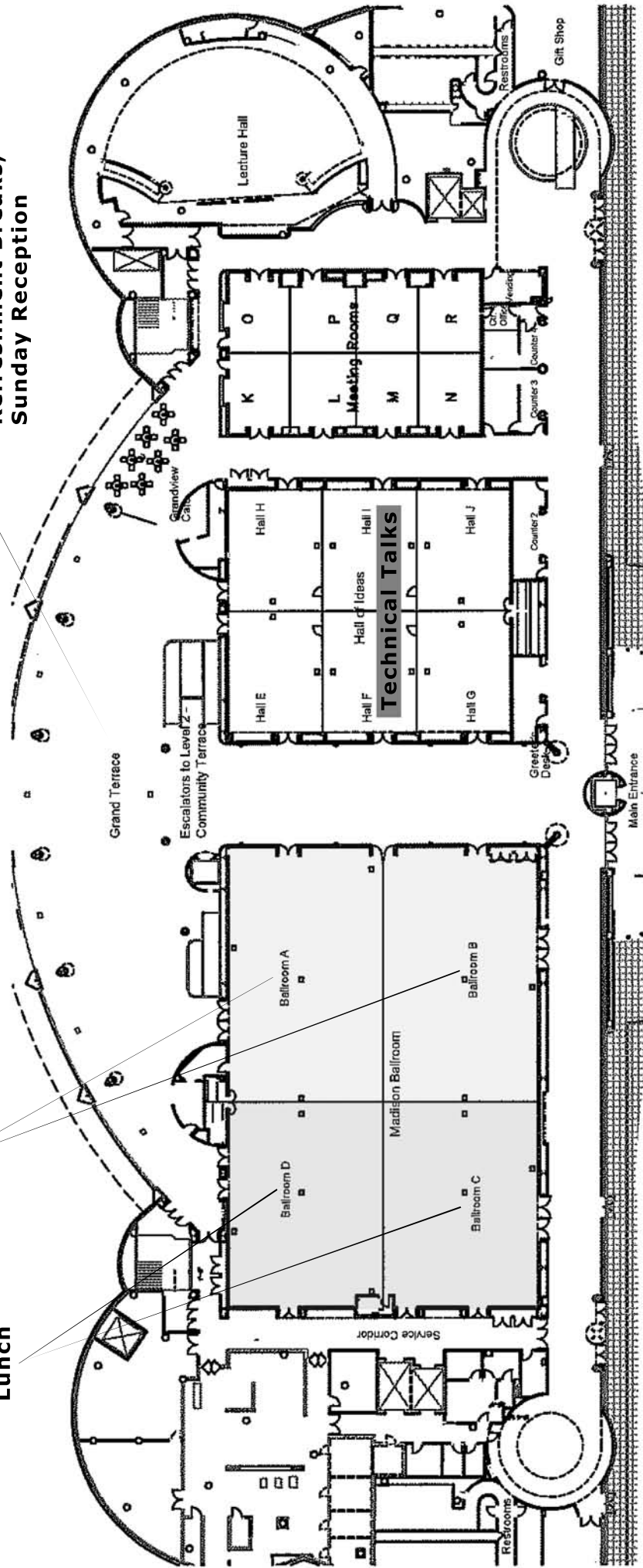
Monona Terrace Map	2
Welcome & Acknowledgements	3
Conference Schedule At-A-Glance	4-5
Meals and Events	6
Technical Presentations Monday Schedule	7-14
Technical Presentations Tuesday Schedule	15-18
Technical Presentations Wednesday Schedule	18-26
Poster Session	27-33
Plenary Abstracts	34-35
Plenary Speaker Profiles	36-37
Foreign Scholar Travel Awards	38
NASA-MSU Professional Enhancement Awards	39
Exhibitors	40
Advertisers	41
Area Restaurants	42-44
Entertainment and Events	45

Monona Terrace Convention Center

Plenary Sessions & Workshops

Exhibits, Posters,
Continental Breakfast,
Refreshment Breaks,
Sunday Reception

Lunch



WELCOME & ACKNOWLEDGEMENTS

US-IALE 2008 Annual Symposium

From the local co-hosts:

Welcome to the 23rd Symposium of the U.S. Regional Association of the International Association for Landscape Ecology in Madison. This year's meeting theme, ***Landscape Patterns and Ecosystem Processes***, reflects a current frontier in ecosystem and landscape ecology. In addition to a great slate of plenary speakers, there are many exciting workshops, field trips, symposia and contributed talks and posters that should appeal to a broad spectrum of landscape ecologists. We encourage you to take advantage of the opportunities to expand your horizons—attend sessions on topics that are less familiar to you, and meet new landscape ecologists while you renew old acquaintances. While you are here, we also hope you will sample some of the best of the arts, cultural and culinary life that Madison has to offer. From the variety of excellent restaurants and shops downtown and nearby on State Street and Williamson Street, to the art galleries and museums within walking distance of Monona Terrace (Chazen Art Museum, Overture Center), you'll find plenty to keep you occupied in addition to the conference activities. And, after Madison's snowiest winter on record, we're all looking forward to a breath of spring during this year's symposium! Thanks for coming, and enjoy the conference.

Conferences like this don't just happen. Rather, they are the result of much effort by many people. As co-hosts for this meeting, we are tremendously appreciative of contributions from the folks who have so graciously volunteered a substantial amount of their time to make this meeting successful: Sarah Goslee, Program Chair; Matt Gregory, Webmaster; Christine Ribic, Dave Sample, Janet Silbernagel, Tom Albright, Stan Temple, Scott Craven, Mark Rickenbach and Kevin McSweeney, who organized a diverse set of field trips; Erica Smithwick, Daniel Collins, James Forester, Jacqui Frair, Falk Huettman, Lisette Waits and Niko Balkenhal, who organized a terrific group of workshops on current topics in landscape ecology; Martin Simard and Deahn DonnerWright, the current US-IALE Student Representatives as well as Wisconsinites who organized all of the student events; and Ann Wieben, who assisted with a variety of organizational items this year. Furthermore, we appreciate the assistance provided by the enthusiastic UW-Madison graduate students (and wish we could have included all who were interested in helping): Ashley Bennett, Van Butsic, Annette Drewes, Bernie Isaacson, David Duncan, Robert Fahey, Jan Knorn, Tim Kuhman, Emily Mueller, Alexander Prishchepov, Veronique St-Louis, Ben Werling, Peter Wolter and Eric Wood. To one and all, a sincere thank you!

Phil Townsend and Monica Turner, University of Wisconsin, Local co-hosts

From the Program Chair:

The Program Chair would like to thank Todd Lookingbill and Ken Pierce for their help in managing the reviews and editorial tasks. Matt Gregory did all of the database and web management so the program was both well-organized and attractive. His hard work will help future Program Chairs.

The following people provided abstract reviews, an important part of the assembly of a quality program:

Li An · Daniel Bain · Kimberley Brosofske · Tenley Conway · Robert Corry · John Dibari
Ashton Drew · Jerry Griffith · Eric Gustafson · Alex Hagen-Zanker · Brian Hall ·
Joshua Halofsky · Geoffrey Henebry · Vanessa Hull · Tim King · Matt Luck · Bret Magdasy
Don McKenzie · Anita Morzillo · Madhura Niphadkar · Amy Pocewicz · Charlotte Pyle
Rachel Riemann · Sam Riffell · Janet Silbernagel · Krishna Vadrevu · Michael Wimberly

Sarah Goslee, Program Chair

Thank you all for taking the time to provide this service, and for your thorough and constructive reviews. Thank you also to everyone who is moderating a session or otherwise contributing to the success of the conference.

CONFERENCE SCHEDULE AT-A-GLANCE

All events will be held at Monona Terrace Convention Center, Level 4, unless otherwise noted. The Hilton is connected to Monona Terrace by skywalk.

SUNDAY, APRIL 6, 2008		
8:00 am - 5:00 pm	Level 4 Lobby	Conference Registration
8:00 am - 5:00 pm	University of Wisconsin	Pre-Conference Workshops Times vary (<i>see below</i>)
8:00 am - 12:00 pm	Pyle Center, Rm. 326 702 Langdon Street	Workshop * <i>Applying for Fellowships and Grants: Tips from the Pros</i>
8:00 am - 12:00 pm	Russell Laboratories Forestry Computer Lab 1630 Linden Drive	Workshop * <i>Digital Data in Landscape Ecology: Applications and Visions</i>
8:00 am - 5:00 pm	Pyle Center, Rm. 335 702 Langdon Street	Workshop * <i>An Introduction to Landscape Genetics for Non-geneticists</i>
12:00 pm - 3:00 pm	The Hilton, LaFollette Room, 2 nd Floor	Executive Board Meeting
1:00 pm - 5:00 pm	Russell Laboratories Forestry Computer Lab 1630 Linden Drive	Workshop * <i>Modern Approaches to Resource Selection Modeling</i>
1:00 pm - 5:00 pm	Science Hall, Geography Computer Lab, Rm. 326 550 N. Park Street	Workshop * <i>Landscape Modeling: A How-to Guide</i>
6:00 pm - 7:30 pm	Grand Terrace	Welcome Reception
8:00 pm - 10:00 pm	Great Dane Pub & Brewery	Student Social

*** The shuttle to the workshops will leave just outside of Monona Terrace, level 4 on the following schedule:**

Depart Monona Terrace for UW Campus: 7:30 am
 Depart UW Campus for Monona Terrace: 12:15 pm
 Depart Monona Terrace for UW Campus: 12:30 pm
 Depart UW Campus for Monona Terrace: 5:15 pm

MONDAY, APRIL 7, 2008		
8:00 am - 5:00 pm	Level 4 Lobby	Conference Registration
8:30 am - 9:30 am	Ballroom A & B	Plenary Session— <i>Watersheds as Landscape Systems: How much do we need to know?</i> Gary Lovett, Cary Institute of Ecosystems Studies
9:30 am - 10:00 am	Grand Terrace	Break
10:00 am - 12:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia All events are held in the Hall of Ideas or Ballroom A & B.
12:00 pm - 1:20 pm	Ballroom C & D	Lunch / Student Mentor Lunch
1:20 pm - 3:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
3:00 pm - 3:20 pm	Grand Terrace	Break
3:20 pm - 5:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
5:00 pm - 7:00 pm	Grand Terrace	Poster Session
7:00 pm - 10:00 pm	Ballroom C	NASA-MSU and Pulliam Dinner

CONFERENCE SCHEDULE AT-A-GLANCE *Continued...*

TUESDAY, APRIL 8, 2008

7:15 am - 8:15 am	Hilton Hotel, 2 nd Floor, Doty Room	Editorial Board Meeting
8:00 am - 5:00 pm	Level 4 Lobby	Conference Registration
8:30 am - 9:30 am	Ballroom A & B	Plenary Session— <i>Landscape Function and Dysfunctional Landscapes: Uncoupling Pattern From Process</i> —Kim With, Kansas State University
9:30 am - 10:00 am	Grand Terrace	Break
10:00 am - 12:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
12:00 pm - 5:00 pm	Depart at 12:30 pm from front of Level 4	Half-Day Field Trips 1. Restoration Ecology and the University of Wisconsin Arboretum 2. Military Ridge Prairie Heritage Area in Southwest Wisconsin 3. Arboretum and Capital Springs State Recreation Area Bike Trip (Bike Trip is from 1:00 to 4:00 pm)
6:00 pm - 9:00 pm	Ballrooms A & B	Conference Banquet <i>Change in Madison's Watersheds and Lakes</i> —Steve Carpenter, University of Wisconsin

WEDNESDAY, APRIL 9, 2008

7:15 am - 8:15 am	Hilton Hotel, 2 nd Floor, LaFollette Room	US-IALE Executive Board Meeting
8:00 am - 5:00 pm	Level 4 Lobby	Conference Registration
8:30 am - 9:30 am	Ballrooms A & B	Plenary Session— <i>Global Patterns of Land Use: Extensification and Intensification of Agriculture as a Force of Global Environmental Change</i> —Jon Foley, University of Wisconsin
9:30 am - 10:00 am	Grand Terrace	Break
10:00 am - 12:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
12:00 pm - 1:20 pm	Ballrooms AB	Lunch and US-IALE Business Meeting
1:20 pm - 3:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
3:00 pm - 3:20 am	Grand Terrace	Break
3:20 pm - 5:00 pm	<i>see detailed schedule</i>	Concurrent Technical Sessions and Symposia
Evening		On Own and Micro Brew Tour

THURSDAY, APRIL 10, 2008

8:00 am	Monona Terrace Level 4 entrance	Field Trip Departure
8:00 am-5:00 pm		The Landscape That Shaped Leopold

CONFERENCE MEALS AND EVENTS US-IALE 2008 Annual Symposium

SUNDAY, APRIL 6TH

Full day workshops will include refreshments; half day workshops will include beverages. There will be a reception in the Grand Terrace at Monona Terrace from 6:00-7:30 and light snacks and a cash bar will be served. You will be on your own for dinner.

MONDAY, APRIL 7TH

Continental breakfast and lunch will be provided; refreshment breaks will only include beverages; there will be a cash bar and light snacks at the Poster Social in the evening. The NASA-MSU Banquet is invitation only. Dinner is on own for other attendees.

TUESDAY, APRIL 8TH

Continental breakfast and a morning beverage break will be available. If you are going on a field trip, a box lunch will be provided. There will be a cash bar at the pre-banquet reception, and the banquet is available for an extra fee (you will be issued a ticket at registration if you purchased a ticket).

WEDNESDAY, APRIL 9TH

Continental breakfast and lunch will be provided; the morning and afternoon refreshment breaks will only include beverages.

THURSDAY, APRIL 10TH

Box lunches will be available for those signed up for the field trip.

US IALE 2009 **ANNUAL SYMPOSIUM**

Snowbird Resort ❄ Utah
Monday, April 13th - Friday, April 17th, 2009

WWW.SNOWBIRD.COM

TECHNICAL PRESENTATIONS

MONDAY, APRIL 7

10:00 AM – 12:00 PM

Hall of Ideas E	Animal Movements in Heterogeneous Landscapes
10:00 - 10:20 AM	Impact of GPS location error on detected scales of animal movement Affiliation: SUNY ESF Authors: <i>David Williams, Amy Dechen, William Porter</i>
10:20 - 10:40 AM	Incorporating movement behavior into resource selection models Affiliation: The University of Chicago Authors: <i>James Forester, Hae Im</i>
10:40 - 11:00 AM	Identifying functional movement corridors using GPS collar data Affiliation: Northern Arizona University Authors: <i>Tabitha Graves, Sean Farley, Michael Goldstein, Christopher Servheen</i>
11:00 - 11:20 AM	Habitat use among GPS-collared white-tailed deer in central NY: Implications for disease management Affiliation: SUNY-ESF Authors: <i>Amy Dechen, David Williams, William Porter</i>
11:20 - 11:40 AM	Using movement models to estimate population densities of a territorial species Affiliation: University of Alberta Authors: <i>Evelyn Merrill, Nathan Webb</i>
11:40 AM - 12:00 PM	Using animal movement patterns to reveal life history events: Parturition in mule deer Affiliation: Department of Biological Sciences Authors: <i>John Kie, Ryan Long, R Terry Bowyer</i>
Hall of Ideas J	Ecosystem Processes
10:00 - 10:20 AM	Hierarchical spatial patterning of forest understory plant diversity Affiliation: UW-Madison Authors: <i>Julia Burton, David Mladenoff, Jodi Forrester</i>
10:20 - 10:40 AM	Genetic mosaics and ecosystem functioning: The influence of aspen clones on ecosystem processes across natural landscapes Affiliation: University of Wisconsin Authors: <i>Michael Madritch, Samantha Greene, Richard Lindroth</i>
10:40 - 11:00 AM	Gradient prediction of vegetation composition Affiliation: USFS - Rocky Mt. Research Station Authors: <i>Jeffrey Evans, Samuel Cushman</i>
11:00 - 11:20 AM	Montane meadow butterfly community compositional changes as a function of time and meadow type Affiliation: Iowa State University Authors: <i>Jennet Caruthers, Diane Debinski</i>
11:20 - 11:40 AM	Seed flow from a dry calcareous grassland community into the adjacent landscape Affiliation: Swiss Federal Research Institute WSL Authors: <i>Jacqueline Bolli, Helene Wagner, Harald Bugmann, Christoph Scheidegger, Peter Edwards</i>
Ballroom AB	H. Ronald Pulliam Symposium: Sources, Sinks, and Sustainability
10:00 - 10:05 AM	Introductory remarks— <i>Jianguo (Jack) Liu, Michigan State University</i>
10:05 - 10:20 AM	Impact of a classic paper by H. Ronald Pulliam: An overview of the first twenty years (1988-2007) Affiliation: Michigan State University Authors: <i>Vanessa Hull, Anita Morzillo, Jianguo Liu</i>

MONDAY TECHNICAL PRESENTATIONS *Continued...*

10:20 - 10:35 AM	Connecting metapopulation approaches to source sink ideas Affiliation: University of California Author: <i>Alan Hastings</i>
10:35 - 10:50 AM	Evolution in source-sink environments: Implications for niche conservatism and community interactions Affiliation: University of Florida Author: <i>Robert Holt</i>
10:50 - 11:05 AM	Source-sink dynamics emerging from unstable ideal-free habitat selection Affiliation: Lakehead University Author: <i>Douglas Morris</i>
11:05 - 11:20 AM	Sources, sinks, and model accuracy Affiliation: U.S. Environmental Protection Agency Authors: <i>Matthew Etterson, Laura Nagy</i>
11:20 - 11:35 AM	Source-sink dynamics of virulence evolution Affiliation: University of Washington Authors: <i>Evgeni Sokurenko</i>
11:35 - 11:50 AM	Scale-dependence of habitat sources and sinks Affiliation: Lincoln University Authors: <i>Jeffrey Diez, Itamar Giladi</i>
11:50 - 12:05 AM	Temporal stochasticity interacts with habitat quality and configuration to affect population persistence Affiliation: Mars Hill College Authors: <i>Scott Pearson, Jennifer Fraterrigo, Monica Turner</i>
Hall of Ideas I	Landscape Change
10:00 AM - 10:20 AM	The role of climate in woodland expansion into the west-central Great Plains, USA Affiliation: Penn State University Authors: <i>Margot Kaye, Connie Woodhouse, Stephen Jackson</i>
10:20 - 10:40 AM	Land use—land cover conversion, degradation and regeneration in the southern Bolivian Andes Affiliation: <i>University of Wisconsin - Madison</i> Authors: <i>Jodi Brandt, Philip Townsend</i>
10:40 - 11:00 AM	An assessment of landscape changes in Ohio's Oak Openings Region Affiliation: Metropolitan Park District of the Toledo Area Authors: <i>Timothy Schetter, Karen Root</i>
11:00 - 11:20 AM	Boreal and humid tropical forest cover loss from 2000 to 2005 using MODIS and Landsat data Affiliation: South Dakota State University Authors: <i>Matthew Hansen, Steve Stehman, Peter Potapov, Kyle Pittman, Thomas Loveland, Mark Carroll, Charlene DiMiceli</i>
11:20 - 11:40 AM	Post-socialist forest cover change in the Ukrainian Carpathians Affiliation: Humboldt-University Berlin Authors: <i>Jan Knorn, Patrick Hostert, Volker Radeloff, Tobias Kuemmerle</i>
11:40 AM - 12:00 PM	Characterizing forest cover change in the Congo Basin from 1990 to 2000: Results from the first basin-wide, wall-to-wall mapping effort Affiliation: South Dakota State University Authors: <i>Erik Lindquist, Matthew Hansen</i>
Hall of Ideas F	Landscape Ecology of Infectious Diseases
10:00 - 10:30 AM	The macroscope meets the microscope: Landscape ecology of infectious disease Affiliation: Geographic Information Science Center of Excellence Authors: <i>Michael Wimberly</i>

TECHNICAL PRESENTATIONS *Continued...*

10:30 - 11:00 AM	Spatial epidemiology of vector-borne and zoonotic diseases Affiliation: Emory University, Dept. of Environmental Studies Author: <i>Uriel Kitron</i>
11:00 - 11:30 AM	Landscape constraints on Hantavirus distribution in Paraguay: A hierarchical framework Affiliation: Kansas State University Authors: <i>Douglas Goodin, David Koch, Kabita Ghimire</i>
11:30 AM - 12:00 PM	Quantifying pattern, exploring process: Spatial statistics and disease ecology Affiliation: Emory University Authors: <i>David Wheeler, Lance Waller</i>
Hall of Ideas G	Spatial Analysis 1
10:00 - 10:20 AM	Random Forests and Nearest Neighbors: Methods for mapping the West Cascades of Oregon Affiliation: Oregon State University Authors: <i>Emilie Grossmann, Janet Ohmann, Kenneth Pierce, James Kagan, Heather May, Matthew Gregory</i>
10:20 - 10:40 AM	Identification of a limited-scale fractal drainage system Affiliation: University of Montana Authors: <i>Matthew Luck, Ricardo Mantilla, Bruce Milne, Vijay Gupta</i>
10:40 - 11:00 AM	Pseudo-history approach to uncovering landscape processes Affiliation: San Diego State University Authors: <i>Li An, Daniel Brown</i>
11:00 - 11:20 AM	A hierarchical approach to assessing landscape similarity and locating control sites for experimental landscape studies Affiliation: Department of Natural Resources and Environmental Science Authors: <i>Thomas Dilts, Peter Weisberg, Nathan Bristow</i>
11:20 - 11:40 AM	Identifying potential movement pathways in fragmented landscapes: Incorporating uncertainty in landscape resistance Affiliation: Ecology and Evolutionary Biology, University of Toronto Authors: <i>Bronwyn Rayfield, Marie-Josée Fortin, Andrew Fall</i>
Hall of Ideas H	Urban Landscapes 1
10:00 - 10:20 AM	Urban infrastructure in arid environments: Designing public corridor guidelines for alternative modes of transportation in Tucson, Arizona Affiliation: University of Arizona Authors: <i>Margaret Livingston, Chris Rose</i>
10:20 - 10:40 AM	Estimating the parking lot footprint across the Great Lakes region Affiliation: Purdue University Authors: <i>Amelie Davis, Bryan Pijanowski, Kimberly Robinson, Paul Kidwell</i>
10:40 - 11:00 AM	Relating urban forest canopy development to municipal expansion: The development and landuse/canopycover change of the western Lake Mendota Urban Forest Corridor Affiliation: University of Wisconsin - Madison Authors: <i>Mark Wegner, John Harrington, Janet Silbernagel</i>
11:00 - 11:20 AM	Against the wind: Lack of invasion in an urban forest by exotic street trees Affiliation: University of Toronto Author: <i>Jennifer Weaver</i>
11:20 - 11:40 AM	Influence of vegetation and the built landscape on breeding riparian bird communities of Cincinnati, OH U.S.A.: Land Cover, Scale, and Local Vegetation Affiliation: Conservation Biology Program Authors: <i>Derric Pennington, Robert Blair</i>

MONDAY TECHNICAL PRESENTATIONS *Continued...*

1:20 – 3:00 PM Hall of Ideas E	Challenges in Modeling Forest Landscapes under Climate Change
1:20 - 1:40 PM	Overview: Challenges in modeling forest landscapes under climate change Affiliation: University of Wisconsin-Madison Authors: <i>David Mladenoff, Robert Scheller</i>
1:40 - 2:00 PM	Predicting climate change effects on forest biomass and composition in south-central Siberia Affiliation: Northern Research Station, USDA Forest Service Authors: <i>Eric Gustafson, Anatoly Shvidenko, Brian Sturtevant, Robert Scheller</i>
2:00 - 2:20 PM	Modeling potential impacts of climate change on suitable habitats of 134 trees and 147 birds in the eastern United States Affiliation: Northern Research Station, USDA Forest Service Authors: <i>Louis Iverson, Anantha Prasad, Stephen Matthews, Matthew Peters</i>
2:20 - 2:40 PM	Using multiple scales to simulate the interaction of climate change and forest management in Minnesota Affiliation: University of Wisconsin - Madison Authors: <i>Catherine Ravenscroft, Robert Scheller, Mark White, James Domingo, David Mladenoff</i>
2:40 - 3:00 PM	Simulating effects of climate change and wildfire on forested landscapes Affiliation: Fire Sciences Laboratory, Rocky Mountain Research Station Authors: <i>Rachel Loehman, Robert Keane, Alisa Keyser</i>
Ballroom AB	H. Ronald Pulliam Symposium: Sources, Sinks, and Sustainability
1:20 - 1:35 PM	Regional source-sink dynamics and metalandscape connectivity of grassland birds: An unfolding conservation crisis? Affiliation: Kansas State University Authors: <i>Kimberly With</i>
1:35 - 1:50 PM	An experimental examination of the role of dispersal for the spatial population dynamics of the butterfly, <i>Parnassius smintheus</i> Affiliation: University of Cincinnati Authors: <i>Stephen Matter, Jens Roland</i>
1:50 - 2:05 PM	Source-sink status of local populations and their demographic contributions to a population network: The reed bunting as a case study Affiliation: University of Zurich Authors: <i>Gilberto Pasinelli, Jon Runge, Karin Schiegg</i>
2:05 - 2:20 PM	Maintaining connectivity: Topological considerations Affiliation: Hungarian Natural History Museum Author: <i>Ferenc Jordán</i>
2:20 - 2:35 PM	Source and sink populations of Blue Tits (<i>Parus caeruleus</i> L.) in Mediterranean heterogeneous landscapes Affiliation: Centre National de la Recherche Scientifique (C.N.R.S.) Author: <i>Paula Dias</i>
2:35 - 2:50 PM	Sources and sinks in the evolution and persistence of mutualisms Affiliation: University of Wyoming Authors: <i>Craig Benkman, Adam Siepielski</i>
Hall of Ideas F	Landscape Ecology of Infectious Diseases
1:20 - 1:50 PM	Land use and biodiversity change: Implications for disease resurgence Affiliation: University of Wisconsin Authors: <i>Jonathan Patz, Sarah Olson</i>
1:50 - 2:20 PM	Landscape ecology of antibiotic resistance Affiliation: University of Minnesota Author: <i>Randall Singer</i>

TECHNICAL PRESENTATIONS *Continued...*

2:20 - 2:50 PM	Regional patterns of antibiotic resistance: Roads and microbial transmission in northern coastal Ecuador Affiliation: University of Michigan Author: <i>Joseph Eisenberg</i>
Hall of Ideas J	Remote sensing
1:20 - 1:40 PM	A comparison of classification techniques for mapping land cover in southwest Ohio Affiliation: Miami University Authors: <i>Mary Henry, Neil Winn</i>
1:40 - 2:00 PM	Detecting understory vegetation using MODIS data: Implications for giant panda habitat evaluations Affiliation: Michigan State University Authors: <i>Mao-Ning Tuanmu, Andrés Viña, Scott Bearer, Jianguo Liu</i>
2:00 - 2:20 PM	Mapping the flooded forest of the Congo Basin using multisource data Affiliation: South Dakota State University Authors: <i>Jean-Robert Bwangoy-Bankanza, Matthew Hansen</i>
2:20 - 2:40 PM	Mapping invasive reed canarygrass at the landscape scale with remote sensing Affiliation: Dartmouth College Author: <i>Jonathan Chipman</i>
2:40 - 3:00 PM	Quantifying three-dimensional forest canopy structure of a mixed species landscape using LiDAR remote sensing data Affiliation: Dept. of Forest & Wildlife Ecology, University of Wisconsin Authors: <i>Jordan Muss, David Mladenoff</i>
Hall of Ideas G	Spatial Analysis 2
1:20 - 1:40 PM	"LandMetrics-3D"—Landscape metrics for raster-based structure analysis in three dimensions Affiliation: Leibniz Institute of Ecological and Regional Development Authors: <i>Ulrich Walz, Sebastian Hoehstetter</i>
1:40 - 2:00 PM	Neutral model analysis of landscape patterns from mathematical morphology Affiliation: USDA Forest Service, Southern Research Station Authors: <i>Kurt Riitters, Peter Vogt, Pierre Soille, Jacek Kozak, Christine Estreguil</i>
2:00 - 2:20 PM	Development and applications of mathematical morphology in landscape pattern analysis Affiliation: European Commission, Joint Research Centre Authors: <i>Peter Vogt, Christine Estreguil, Kurt Riitters</i>
2:20 - 2:40 PM	Two graph theory methods to assess corridor robustness Affiliation: University of Texas Austin Authors: <i>Naiara Pinto, Tim Keitt</i>
Hall of Ideas I	Species Distributions 1
1:20 - 1:40 PM	Male Kirtland's warblers response to landscape structure during periods of varying habitat amount and population size Affiliation: Institute of Applied Ecosystem Studies, US Forest Service Authors: <i>Deahn Donner, Christine Ribic, John Probst</i>
1:40 - 2:00 PM	Effects of landscape composition and configuration on Barred Owl (<i>Strix varia</i>) abundance in Midwest landscapes Affiliation: Bethel College Authors: <i>Heather Lumpkin, Cathy Weakland</i>
2:00 - 2:20 PM	Spatial ecology and conservation of two sloth species in a cacao landscape in Limón, Costa Rica Affiliation: University of Wisconsin, Milwaukee Public Museum Authors: <i>Christopher Vaughan, Ray Guries, Geovanny Herrera, Oscar Ramirez</i>

MONDAY TECHNICAL PRESENTATIONS *Continued...*

2:20 - 2:40 PM	Spatio-temporal analysis of Northern Shrimp (<i>Pandalus Borealis</i>) abundance and distribution within the Gulf of St. Lawrence Affiliation: University of Toronto Authors: <i>Jonathan Ruppert, Matthew Windle, George Rose, Marie-Josée Fortin</i>
2:40 - 3:00 PM	The influence of spatial heterogeneity on the functional response of wolves Affiliation: University of Alberta Department of Biological Sciences Authors: <i>Heather McPhee, Evelyn Merrill, Nathan Webb</i>
Hall of Ideas H	Urban Landscapes 2
1:20 - 1:40 PM	Green roofs and amber darters: Structural and regulatory tools for multifunctional urban landscapes Affiliation: River Basin Center, Odum School of Ecology Authors: <i>Timothy Carter, Seth Wenger, Laurie Fowler</i>
1:40 - 2:00 PM	Landscape pattern analysis in the Seoul Metropolitan Region Affiliation: Florida State University Author: <i>Sunhui Sim</i>
2:00 - 2:20 PM	Extracting exurban development over large spatial extent using multiple geomatic approaches Affiliation: University of Toronto at Mississauga Authors: <i>Namrata Shrestha, Tenley Conway</i>
2:20 - 2:40 PM	Influences of land use intensity and habitat connectivity on protected areas in urban landscapes Affiliation: Center for Landscape Analysis, The Wilderness Society Authors: <i>Sarah Reed, Adina Merenlender, Shane Feirer</i>
3:20 – 5:00 PM Hall of Ideas H	Carbon Dynamics
3:20 - 3:40 PM	Carbon dynamics on a forested landscape using the Carbon Budget Model of the Canadian Forest Sector Affiliation: Canadian Forest Service Authors: <i>Caren Dymond, Werner Kurz, Greg Rampley, Graham Stinson, Thomas White, Cindy Shaw, Carolyn Smyth, Eric Neilson, Mike Magnan, Brian Simpson, Gary Zhang, Stephen Kull</i>
3:40 - 4:00 PM	Climate perturbations and lakes: Estimating sensitivities of water and carbon budgets in a 6000-lake landscape model Affiliation: Université de Montréal Authors: <i>Jeffrey Cardille, Stephen Carpenter, Michael Coe, Jonathan Foley, Paul Hanson, Monica Turner, Julie Vano</i>
4:00 - 4:20 PM	Using the FORE-SCE land cover model for biofuels-driven land-cover change in the Northern Great Plains Affiliation: SAIC, contractor to USGS EROS Data Center Author: <i>Terry Sohl</i>
4:20 - 4:40 PM	Biogeophysical consequences of widespread cultivation of switchgrass as a biofuel feedstock in the northern Great Plains Affiliation: South Dakota State University/GIScCE Authors: <i>Geoffrey Henebry, Gabriel Senay</i>
Hall of Ideas E	Challenges in Modeling Forest Landscapes under Climate Change
3:20 - 3:40 PM	TNC scientists' challenge to simulate climate change impacts on world forests: How to make it useful to conservation practitioners Affiliation: The Nature Conservancy Authors: <i>Dominique Bachelet, Barry Baker, David Shock</i>

TECHNICAL PRESENTATIONS *Continued...*

3:40 - 4:00 PM	The interactions of climate, vegetation properties and wildfire dynamics in mountain landscapes of the European Alps Affiliation: Forest Ecology ETHZ Authors: <i>Harald Bugmann, Björn Reineking</i>
4:00 - 4:20 PM	Northeastern US regional predictions of forest response to changing climate and rising CO2 Affiliation: University of New Hampshire Authors: <i>Julian Jenkins, Scott Ollinger, Christine Goodale, Kathrine Hayhoe</i>
4:20 - 4:40 PM	Tree species range shifts under climate change: What do process-based models say at the continental scale? Affiliation: McGill University - Biology Department Authors: <i>Xavier Morin, Martin Lechowicz, Wilfried Thuiller, Isabelle Chuine</i>
4:40 - 5:00 PM	Discussion
Ballroom AB	H. Ronald Pulliam Symposium: Sources, Sinks, and Sustainability
3:20 - 3:35 PM	Sources, sinks, ecological traps, and the ghost of land use past in declining songbirds Affiliation: Florida Museum of Natural History Author: <i>Scott Robinson</i>
3:35 - 3:50 PM	Population dynamics in heterogeneous landscapes: Global change and regional sustainability Affiliation: New Mexico State University Author: <i>Mark Andersen</i>
3:50 - 4:05 PM	Demographic and dispersal data from anthropogenic grasslands: Sources or sinks? Affiliation: Purdue University Authors: <i>John Dunning Jr., Alexandra Houston, Daniel Scheiman</i>
4:05 - 4:20 PM	The source-sink dynamics and soundscape patterns of bird communities: A tentative explanation Affiliation: Urbino University Authors: <i>Almo Farina, Davide Morri, Brian Napoletano</i>
4:20 - 4:35 PM	Source-sink population dynamics and sustainable leaf harvest of the understory palm <i>Chamaedorea radicalis</i> Affiliation: Saint Anselm College Authors: <i>Eric Berry, David Gorchoy, Bryan Endress</i>
4:35 - 4:50 PM	Temporal heterogeneity in source-sink dynamics: Intrinsic and extrinsic effects Affiliation: University of Louisiana at Lafayette Authors: <i>Derek Johnson, Tim Keitt</i>
4:50 - 5:05 PM	When sinks rescue sources in dynamic environments: A new opportunity for management Affiliation: Iowa State University Authors: <i>Brent Danielson, Matthew Falcy</i>
Hall of Ideas J	Invasive Species
3:20 - 3:40 PM	Identifying focal points of invasive species spread Affiliation: University of Michigan Authors: <i>Ines Ibanez, John Silander, Adam Wilson</i>
3:40 - 4:00 PM	Fire regime, legacy effects, and cheatgrass invasion in the Great Basin of central Nevada Affiliation: University of Nevada-Reno, Dept. of NRES Authors: <i>Dongwook Ko, Peter Weisberg, Ashley Sparrow, Lea Condon</i>
4:00 - 4:20 PM	The bioeconomics of dreissenid mussels in the western United States Affiliation: University of Toledo Authors: <i>Jonathan Bossenbroek, David Finnoff, David Lodge</i>

MONDAY TECHNICAL PRESENTATIONS *Continued...*

4:20 - 4:40 PM	Agricultural land-use legacies and non-native invasive plants in a southern Appalachian forest 100 years post-abandonment Affiliation: University of Wisconsin-Madison Authors: <i>Timothy Kuhman, Scott Pearson, Monica Turner</i>
Hall of Ideas F	Landscape Ecology of Infectious Diseases
3:20 - 5:00 PM	Discussion
Hall of Ideas G	Social Issues
3:20 - 3:40 PM	Using a role-playing game to inform the development of land-use models for the study of complex socio-ecological systems Affiliation: Purdue University Authors: <i>Camille Washington-Ottombre, Bryan Pijanowski, David Campbell, Jennifer Olson</i>
3:40 - 4:00 PM	Characterizing ecological landscapes by social attributes: A multi-scale study in Missouri, USA Affiliation: University of Missouri Authors: <i>Hong He, Adam Baer, Bernard Lewis</i>
4:00 - 4:20 PM	Conservation success leads to human-wildlife conflicts: Spatial patterns of crop damages and livestock depredation in Wolong Nature Reserve for Giant Pandas, China Affiliation: Michigan State University Authors: <i>Wei Liu, Xiaogang Shi, Ruijuan Qi, Senlong Jin, Jianguo Liu</i>
4:20 - 4:40 PM	Residential landscape water conservation: A multiple methods study Affiliation: University of Idaho Author: <i>Barbara Andersen</i>
4:40 - 5:00 PM	Response of boat traffic to new speed regulations: The role of landscape structure Affiliation: Florida Fish & Wildlife Conservation Commission Authors: <i>Richard Flamm, Jay Gorzelany</i>
Hall of Ideas I	Species Distributions 2
3:20 - 3:40 PM	Assessing knowledge-based predictions of wildlife distributions and the influences of decision rules Affiliation: North Carolina State University Authors: <i>Edward Laurent, Matthew Rubino, Steven Williams, Alexa McKerrow, Theodore Simons, Jaime Collazo</i>
3:40 - 4:00 PM	Assessing northern spotted owl dispersal habitat for managers in Washington State Affiliation: Washington State Department of Natural Resources Authors: <i>Joshua Halofsky, Sean Gordon, Heather McPherson, Lowell Dickson</i>
4:00 - 4:20 PM	Modeling potential distribution of Norway Maple (<i>Acer platanoides</i>) in Massachusetts, USA: A comparative assessment of Mahalanobis typicality and ecological niche factor analysis Affiliation: University of North Carolina at Charlotte Authors: <i>Tomas Vaclavik, Marlon Ortega</i>
4:20 - 4:40 PM	Cost-path sensitivity analysis for predicting brown bear distribution in European Russia Affiliation: University Of Wisconsin - Madison Authors: <i>Pedro Camilo Alcantara, Leonid Baskin, Natasha Novoselova, M Vaisfeld, Volker Radeloff</i>
4:40 - 5:00 PM	A landscape level occupancy model of bear habitat in the Great Lakes region based on empirical data Affiliation: University of Wisconsin-Madison Authors: <i>David MacFarland, Timothy Van Deelen, David Garshelis, Dwayne Etter</i>

TECHNICAL PRESENTATIONS *Continued...*

TUESDAY, APRIL 8

10:00 AM – 12:00 PM

Hall of Ideas H	Conservation Planning
10:00 - 10:20 AM	Using logistic regression to improve the mapping of habitat potential for conservation and recovery of the endangered Karner blue butterfly in Wisconsin Affiliation: University of Wisconsin-Madison Authors: <i>Sarah Pratt, Theodore Sickley, David Mladenoff</i>
10:20 - 10:40 AM	Prioritizing habitat and assessing differential risk of habitat loss across the landscape for the Crested Caracara in Florida Affiliation: Bowling Green State University Authors: <i>Jami Barnes, Karen Root</i>
10:40 - 11:00 AM	Conservation banking at the landscape-scale for the red-cockaded woodpecker Affiliation: Michigan State University Authors: <i>Doug Bruggeman, Mike Jones, Kim Scribner</i>
11:00 - 11:20 AM	A multispecies approach for large-scale management and conservation in Florida Affiliation: Bowling Green State University Author: <i>Karen Root</i>
11:20 - 11:40 AM	Using spatially explicit models to site marine protected areas (MPAs): A comparison of model results for data-rich and data-poor MPAs Affiliation: University of Alaska Fairbanks Authors: <i>Falk Huettmann, Susan Hazlett</i>
11:40 AM - 12:00 PM	Performance monitoring for Brazil's protected area system Affiliation: South Dakota State University Authors: <i>Christopher Barber, Mark Cochrane, Carlos Souza Jr.</i>
Hall of Ideas E	Cross-boundary Challenges to the Creation of Multifunctional Agricultural Landscapes
10:00 - 10:20 AM	Stakeholder science: Oxymoron or integrated perspective? Affiliation: University of Michigan Author: <i>Joan Nassauer</i>
10:20 - 10:40 AM	In search of more sustainable agriculture: Testing scenarios with stakeholders Affiliation: University of Illinois Author: <i>William Sullivan</i>
10:40 - 11:00 AM	Deep roots: Ecological restoration in socio-cultural context Affiliation: Iowa State University Authors: <i>Ryan Atwell, Lisa Schulte, Lynne Westphal</i>
11:00 - 11:20 AM	The end of the rainbow: Why integrative approaches to landscape management are so hard to achieve Affiliation: Murdoch University Authors: <i>Richard Hobbs, Allison Helen</i>
11:20 - 11:40 AM	Arable landscapes in England: The role of the landscape character approach in supporting integrated management initiatives Affiliation: University of Sheffield Author: <i>Carys Swanwick</i>
11:40 AM - 12:00 PM	Are environmental and social landscape homogenization linked? Three cases from Iowa, USA Affiliation: Iowa State University Authors: <i>Paul Brown, Lisa Schulte</i>

TUESDAY TECHNICAL PRESENTATIONS *Continued...*

Hall of Ideas I	Development Landscapes
10:00 - 10:20 AM	Effects of land use/land cover change on nitrogen dynamics and water quality in urbanizing regions: A coupled human-natural systems model Affiliation: Urban Ecology Research Laboratory, University of Washington Authors: <i>Steven Walters, Marina Alberti, Lucy Hutyra</i>
10:20 - 10:40 AM	Scale, habitat and fragmentation effects on a pollinator assemblage in an urbanizing landscape Affiliation: University of Colorado, Boulder Authors: <i>Sarah Hinnners, Carol Wessman, Carol Kearns</i>
10:40 - 11:00 AM	Predicting and visualizing residential growth: Implications for land management and conservation Affiliation: Sonoran Institute Author: <i>John DiBari</i>
11:00 - 11:20 AM	Consequences of alternative residential development scenarios for agriculture, fire, water, and social acceptability in a rural landscape in north Idaho, USA Affiliation: The Nature Conservancy Authors: <i>Amy Pocewicz, Max Nielsen-Pincus, Caren Goldberg, Penelope Morgan, Jo Ellen Force, Lisette Waits, Lee Vierling</i>
11:20 - 11:40 AM	Land parcelization and fragmentation: A preview of impending change Affiliation: Center for Land Use Education, UW-Stevens Point Authors: <i>Dan McFarlane, Anna Haines, Timothy Kennedy</i>
11:40 AM - 12:00 PM	Exurban change in the American West: How does planning policy and practice shape development patterns? Affiliation: University of Wisconsin-Whitewater Author: <i>Eric Compas</i>
Hall of Ideas G	Ecosystem Management 1
10:00 - 10:20 AM	Contribution of silvopastoral systems to biodiversity conservation by providing habitat and connectivity in the Copan River watershed, Honduras Affiliation: Tropical Agricultural Research and Higher Education Center Authors: <i>Andre Sanfiorenzo, Fabrice DeClerck, Tamara Benjamin, Sergio Velásquez</i>
10:20 - 10:40 AM	Integrating landscape amenities with historic parcelization patterns to better target landscape conservation efforts Affiliation: Center for Land Use Education, UW-Stevens Point Authors: <i>Eric Olson, Dan McFarlane</i>
10:40 - 11:00 AM	Bayesian Belief Networks: Linking science and management to better step-down national conservation objectives to regional and refuge levels Affiliation: NCSU Biodiversity & Spatial Information Center Authors: <i>Ashton Drew, Jaime Collazo, John Stanton, Alexa McKerrow</i>
11:00 - 11:20 AM	Ecological integrity as an economic variable: The need for aggregated landscape scale indices Affiliation: University of Wisconsin Authors: <i>Ronald Raunika, Joseph Buongiorno</i>
11:20 - 11:40 AM	A comparison of watershed and county scale landscape patterns in the karst landscape (Driftless Region) of Minnesota for land-use policy, planning, and management Affiliation: Conservation Biology Program, University of Minnesota Authors: <i>Mary Williams, Laura Musacchio</i>
11:40 AM - 12:00 PM	Modeling the adaptive behavior of individuals to capture the emergence of complex landscape patterns: An intelligent agent approach Affiliation: Department of Geography, University of Iowa Authors: <i>Wenwu Tang, David Bennett</i>

TECHNICAL PRESENTATIONS *Continued...*

Ballroom AB	H. Ronald Pulliam Symposium: Sources, Sinks, and Sustainability
10:00 - 10:15 AM	Putting in perspective the positive and negative effects of corridors Affiliation: North Carolina State University Authors: <i>Nick Haddad, Brian Hudgens, Ellen Damschen, Doug Levey, John Orrock, Josh Tewksbury, Aimee Weldon</i>
10:15 - 10:30 AM	Contribution of source-sink theory to protected area establishment and management Affiliation: Montana State University Author: <i>Andrew Hansen</i>
10:30 - 10:45 AM	Evaluating reserve systems to sustain viable metapopulations in modified landscapes: The northern flying squirrel in rainforest of Southeast Alaska Affiliation: USDA Forest Service Authors: <i>Winston Smith, David Person, Sanjay Pyare</i>
10:45 - 11:00 AM	Sustaining bald eagles within the Chesapeake Bay: Confronting market pressures and urban sprawl Affiliation: College of William and Mary Author: <i>Bryan Watts</i>
11:00 - 11:15 AM	Policy incentives, land managers' strategies and source-sink dynamics: The formation of community patterns at the landscape scale Affiliation: Macaulay Institute Authors: <i>Alessandro Gimona, Gary Polhill, Ben Davies, Davy Decorps, Guillaume Dury</i>
11:15 - 11:30 AM	Source-sink dynamics and conservation of marine metapopulations Affiliation: The College of William and Mary Authors: <i>Romuald Lipcius, Sebastian Schreiber</i>
11:30 - 11:45 AM	Habitat fragmentation, sources, sinks, and interactions with regional management in the Fiordland Marine Area, New Zealand Affiliation: University of Otago Author: <i>Stephen Wing</i>
11:45 AM - 12:00 PM	When theory meets reality: Sources and sinks in conservation Affiliation: The Nature Conservancy Author: <i>John Wiens</i>
Hall of Ideas J	Landscape Pattern
10:00 - 10:20 AM	Climate change and land-use diversification on Mount Kenya: Coupled simulations from 2000 to 2050 Affiliation: Purdue University Authors: <i>Camille Washington-Ottombre, Dasaraden Mauree, Bryan Pijanowski, Nathan Moore, Jennifer Olson</i>
10:20 - 10:40 AM	Land-use effects on vegetation interannual variability across heterogeneous landscapes Affiliation: University of Iowa Authors: <i>Marc Linderman, Yu Zeng</i>
10:40 - 11:00 AM	Elasticity and loop analysis: Tools for understanding forest landscape response to climatic change in spatial dynamic models Affiliation: University of Illinois at Urbana-Champaign Authors: <i>Chonggang Xu, George Gertner, Burak Güneralp, Robert Scheller</i>
11:00 - 11:20 AM	The effect of landscape structure on functional connectivity in dry meadow plant communities Affiliation: Swiss Federal Inst. for Forest, Snow and Landscape Research Authors: <i>Barbara Schlup, Michael Nobis, Harald Bugmann, Peter Edwards, Helene Wagner</i>

TECHNICAL PRESENTATIONS *Continued...*

11:20 - 11:40 AM	Edges: The frontiers in landscape studies Affiliation: University of Toledo Author: <i>Jiquan Chen</i>
Hall of Ideas F	Spread of Exotic Species in Fragmented Forests
10:00 - 10:20 AM	Spread of exotic species in fragmented forests: Introduction and prospectus Affiliation: University of Maryland Center for Environmental Science Authors: <i>Todd Lookingbill, Emily Minor, Joseph Ferrari, Robert Gardner</i>
10:20 - 10:40 AM	Modelling the risk of Emerald Ash Borer spread in Ohio and Michigan Affiliation: USDA Forest Service Authors: <i>Anantha Prasad, Louis Iverson, Matthew Peters, Jonathan Bossenbroek, Mark Schwartz</i>
10:40 - 11:00 AM	Development of the FIRST national early warning system for forest threats Affiliation: Eastern Forest Threat Assessment Center, USDA Forest Service Authors: <i>William Hargrove, Forrest Hoffman, Danny Lee</i>
11:00 - 11:20 AM	Habitat connectivity effects on the spread of invasive species: A myth? Affiliation: US Forest Service, Northern Research Station Authors: <i>Andrew Liebhold, R Morin</i>
11:20 - 11:40 AM	But it wasn't here last year! Spread of a nonnative plant species in a human-shaped forest landscape Affiliation: Ohio University Author: <i>Glenn Matlack</i>
11:40 AM - 12:00 PM	Using network theory to predict and manage exotic plant invasions Affiliation: UMCES Appalachian Laboratory Authors: <i>Emily Minor, Robert Gardner</i>

WEDNESDAY, APRIL 9, 2008

10:00 AM – 12:00 PM

Hall of Ideas F	Beta Diversity in Landscape Ecology
10:00 - 10:30 AM	Beta-diversity and landscape ecology Affiliation: Duke University Author: <i>Dean Urban</i>
10:30 - 11:00 AM	Scale-specific drivers of community turnover in a continent-wide biological survey Affiliation: University of Texas at Austin Author: <i>Tim Keitt</i>
11:00 - 11:30 AM	A small-scale experiment can test landscape-scale questions in grassland plant metacommunities Affiliation: University of Kansas Author: <i>Erin Questad</i>
11:30 AM - 12:00 PM	Environmental heterogeneity increases beta diversity in experimental metacommunities Affiliation: University of Colorado Authors: <i>Kendi Davies, Marcel Holyoak, Kim Preston, Valerie Offeman, Quenby Lum</i>
Hall of Ideas J	Disturbance 1
10:00 - 10:20 AM	Understanding wildlife responses to human disturbance through simulation modelling: A conservation tool Affiliation: Purdue University Authors: <i>Victoria Bennett, Matthew Beard, Patrick Zollner, Esteban Fernandez-Juricic, Lynne Westphal, Cherie LeBlanc</i>

WEDNESDAY TECHNICAL PRESENTATIONS *Continued...*

10:20 - 10:40 AM	Interactions between disturbance agents in conifer forests: Fire-injured lodgepole pine as a potential reservoir for mountain pine beetles (<i>Dendroctonus ponderosae</i> Hopkins) Affiliation: UW Madison Depts. of Forest Ecology and Entomology Authors: <i>Erinn Powell, Kenneth Raffa</i>
10:40 - 11:00 AM	Visualization of two natural disturbances Affiliation: Clemson University Authors: <i>Bo Song, Chiao-Ying Chou, Brian Williams, Roy Hedden, Thomas Williams, Kier Klepzig, John Hom, Danny Lee, Carl Trettin</i>
11:00 - 11:20 AM	The effects of grazing and shrub-clearing on small scale spatial pattern of vegetation and on herbaceous species richness Affiliation: Technion - Israel Institute of Technology Authors: <i>Avi Bar Massada, Ofri Gabay, Avi Perevolotsky, Yohay Carmel</i>
11:20 - 11:40 AM	Ecological response to multiple severe disturbances in a subalpine landscape Affiliation: University of Colorado Authors: <i>Carol Wessman, Kendra Morliengo-Bredlau, Kerry Kemp, Paul Sitzmann</i>
11:40 AM - 12:00 PM	Disturbance, space, and time: Long-term mesquite dynamics in Sonoran desert grasslands (1932 – 2006) Affiliation: School of Natural Resources Authors: <i>Dawn Browning, Steve Archer</i>
Hall of Ideas G	Ecosystem Management 2
10:00 - 10:20 AM	Assessing the geographic distribution and invertebrate biodiversity of naturally fishless lakes in Maine, USA Affiliation: Department of Wildlife Ecology, University of Maine Authors: <i>Emily Schilling, Cyndy Loftin, Alex Huryn, Katie DeGoosh</i>
10:20 - 10:40 AM	Soil properties and dominant vegetation cover on a reclaimed coal mine end cut in the Aspen Parkland region of north-central Alberta Affiliation: University of Guelph Authors: <i>Tremayne Stanton-Kennedy, Anne Naeth, Karen Landman</i>
10:40 - 11:00 AM	Effects of enlarging grassy habitat patches on grassland birds and their predators Affiliation: USGS Wisconsin Cooperative Wildlife Research Unit Authors: <i>Christine Ribic, Kevin Ellison, David Sample</i>
11:00 - 11:20 AM	Assessing the ability of a fire-grazing interaction to mediate trophic relationships in a grassland ecosystem Affiliation: Iowa State University Authors: <i>Finn Pillsbury, James Miller, Diane Debinski, David Engle, Sheri Svehla</i>
11:20 - 11:40 AM	Evaluating the effectiveness of fuels treatments for mitigating the extent and severity of wildfires in the United States Affiliation: South Dakota State University Authors: <i>Mark Cochrane, Michael Wimberly, Mark Finney, Zhi-Liang Zhu</i>
11:40 AM - 12:00 PM	Effects of rural housing density and pattern on forest songbird populations in the Baraboo Hills of southern Wisconsin Affiliation: University of Wisconsin-Madison, Forest and Wildlife Ecology Authors: <i>Adrian Lesak, Anna Pidgeon, Michael Mossman, Volker Radeloff</i>
Hall of Ideas H	Fire
10:00 - 10:20 AM	Reconstructing spatial patterns of historical fire Affiliation: University of Arizona Authors: <i>Tyson Swetnam, Don Falk, Calvin Farris</i>

WEDNESDAY TECHNICAL PRESENTATIONS *Continued...*

10:20 - 10:40 AM	Examining the influence of short-interval fire occurrence on post-fire recovery patterns in chamise chaparral Affiliation: San Diego State University Authors: <i>Caitlin Chason</i>
10:40 - 11:00 AM	Impacts of changing climate and housing densities on wilderness fire management Affiliation: USDA Forest Service, Rocky Mountain Research Station Author: <i>Carol Miller</i>
11:00 - 11:20 AM	Ecological complexity produces simple structure: Power laws in low-severity fire regimes Affiliation: US Forest Service Authors: <i>Donald McKenzie, Lara-Karena Kellogg</i>
11:20 - 11:40 AM	Do different fire modeling methods affect coarse-scale long term vegetation dynamics? Affiliation: University of Missouri-Columbia Authors: <i>Jian Yang, Hong He, Brian Sturtevant, Brian Miranda, Eric Gustafson</i>
Hall of Ideas E	Insect Outbreaks in Forested Landscapes: Spatial Patterns and Ecosystem Responses
10:00 - 10:20 AM	Spatial dynamics of gypsy moth outbreaks in North America Affiliation: US Forest Service, Northern Research Station Authors: <i>Andrew Liebhold, O Björnstad, D Johnson, Kyle Haynes, Christelle Robinet-Makdoud</i>
10:20 - 10:40 AM	Assessing MODIS-based products and techniques for detecting gypsy moth defoliation Affiliation: Science Systems and Applications, Inc. Authors: <i>Joseph Spruce, William Hargrove, Robert Ryan, James Smoot, Don Prados, Rodney McKellip, Steven Sader, Jerry Gasser, George May</i>
10:40 - 11:00 AM	Spatial heterogeneity in host phenology and patterns of gypsy moth defoliation: Mapping potential leaf-out—egg-hatch synchrony using MODIS imagery Affiliation: University of Wisconsin - Madison Authors: <i>Jane Foster, Philip Townsend, David Mladenoff</i>
11:00 - 11:20 AM	Insect defoliations and N cycling in western Maryland: A field and remote sensing study Affiliation: University of Wisconsin-Madison Authors: <i>Brenden McNeil, Philip Townsend</i>
11:20 - 11:40 AM	Green, yellow, red, redder, brown: Using MODIS phenology to estimate forest disturbance in the Upper Midwest Affiliation: Virginia Polytechnic Institute and State University Authors: <i>Kirsten de Beurs, Philip Townsend, Brian Sturtevant</i>
11:40 AM - 12:00 PM	Simulated interactions between spruce budworm and fire: Comparing the past with the future Affiliation: USDA Forest Service, Northern Research Station Authors: <i>Brian Sturtevant, Brian Miranda, Douglas Shinneman, Eric Gustafson</i>
Hall of Ideas I	Landscape Patterns and Ecosystem Processes: The Role of Human Societies
10:00 - 10:25 AM	From factors to processes: Understanding the roles of socio-economic systems as drivers of change in land use systems and their interactions with ecosystem services Affiliation: Macaulay Institute Author: <i>Richard Aspinall</i>

TECHNICAL PRESENTATIONS *Continued...*

10:25 - 10:50 AM	Incorporating human agency into spatial landscape process models Affiliation: University of Michigan Authors: <i>Daniel Brown, Derek Robinson</i>
10:50 - 11:15 AM	Claiming culture in the landscape ecology paradigm Affiliation: University of Michigan Author: <i>Joan Nassauer</i>
11:15 - 11:40 AM	Integrating ecological, economic, and social processes in landscapes: Sustainability modeling approaches Affiliation: Arizona State University Author: <i>Jianguo Wu</i>
11:40 AM - 12:05 PM	Discontinuities, criticality, and resilience in urban landscapes Affiliation: University of Washington Authors: <i>Lucy Hutyra, Marina Alberti</i>
Hall of Fame	Water in the Landscape 1
10:00 - 10:20 AM	The demography of coarse wood in north temperate lakes Affiliation: Landcare Research Authors: <i>Anna Marburg, Sarah Bassak, Timothy Kratz, Monica Turner</i>
10:20 - 10:40 AM	Patterns of stream burial due to urbanization in the mid-Atlantic, U.S. Affiliation: Univ. of Maryland Center for Environmental Science Authors: <i>Andrew Elmore, Sujay Kaushal</i>
10:40 - 11:00 AM	Prioritizing landowner parcels for riparian conservation in the Piedmont of North Carolina Affiliation: Elon University Authors: <i>David Welch, Janet MacFall</i>
11:00 - 11:20 AM	Midges link aquatic and terrestrial ecosystems Affiliation: University of Wisconsin - Madison Authors: <i>Claudio Gratton, Jack Donaldson, Jake Vander Zanden</i>
11:20 - 11:40 AM	Influence of hydroscape configuration on watershed biogeochemistry Affiliation: University of Wisconsin Center for Limnology Authors: <i>Noah Lottig, Emily Stanley, Jeffrey Maxted</i>
11:40 AM - 12:00 PM	Landscape influences on lake chemistry of small dimictic lakes in the human dominated southern Wisconsin landscape Affiliation: U.S. EPA/ORD/LEB Author: <i>Paula Allen</i>
1:20 - 3:00 PM	
Hall of Ideas F	Beta Diversity in Landscape Ecology
1:20 - 1:50 PM	High beta diversity in tallgrass prairie arises from timing and intensity of disturbance Affiliation: Iowa State University Authors: <i>Brian Wilsey, Andrea Blong, Leanne Martin</i>
1:50 - 2:20 PM	Species diversity in structured metacommunities: A network approach Affiliation: University of Texas at Austin Authors: <i>Evan Economo, Tim Keitt</i>
2:20 - 2:50 PM	Running up the scale: From plant traits to beta diversity Affiliation: USDA-ARS Author: <i>Sarah Goslee</i>
Hall of Ideas J	Disturbance 2
1:20 - 1:40 PM	Effects of hurricanes on avian species richness and abundance Affiliation: University of Wisconsin-Madison Authors: <i>Chadwick Rittenhouse, Anna Pidgeon, Thomas Albright, Murray Clayton, Curtis Flather, Volker Radeloff</i>

WEDNESDAY TECHNICAL PRESENTATIONS *Continued...*

1:40 - 2:00 PM	Effects of climate change in glacial fjords: An interdisciplinary study of glacial retreat, soil development, and vegetation growth Affiliation: University of Alaska Fairbanks Authors: <i>Susan Hazlett, Robert Brown, Bruce Molnia</i>
2:00 - 2:20 PM	Characterization and influence of drought on avian abundance and diversity Affiliation: UW-Madison Dept. of Forest and Wildlife Ecology Authors: <i>Thomas Albright, Anna Pidgeon, Murray Clayton, Curtis Flather, Chadwick Rittenhouse, Brian Wardlow, Volker Radeloff</i>
2:20 - 2:40 PM	Quantifying ecological effects of changing precipitation on plant communities in montane meadows Affiliation: Iowa State University Authors: <i>Diane Debinski, Hadley Wickham, Jennet Caruthers</i>
2:40 - 3:00 PM	What the trees have to say: Modeling the potential response of birds to climate change in the Eastern United States Affiliation: Ohio State University Authors: <i>Stephen Matthews, Louis Iverson, Anantha Prasad, Matthew Peters</i>
Hall of Ideas H	Forest History
1:20 - 1:40 PM	Controls on pre-settlement distributions of white pine in the hemlock-hardwood landscape of northern Wisconsin and development of a predictive restoration model Affiliation: University of Wisconsin-Madison Authors: <i>Robert Fahey, Craig Lorimer</i>
1:40 - 2:00 PM	Pre-industrial human land-use and its legacies on today's landscapes: An interdisciplinary study of an old-growth forest in northern Europe Affiliation: Swedish University of Agricultural Sciences Authors: <i>Torbjörn Josefsson, Lars Östlund</i>
2:00 - 2:20 PM	Historical population trends of northern white cedar in the Ojibwe Treaty ceded territories in Wisconsin: Ojibwe knowledge and scientific assessment Affiliation: UW-Madison Nelson Institute for Environmental Studies Authors: <i>Erin LaFaive, Janet Silbernagel</i>
2:20 - 2:40 PM	Using wavelets to identify legacies of historical forest management in spruce budworm host tree species in the Border Lakes Landscape Affiliation: University of Toronto Authors: <i>Patrick James, Brian Sturtevant, Philip Townsend, Peter Wolter, Marie-Josée Fortin</i>
Hall of Ideas E	Insect Outbreaks in Forested Landscapes: Spatial Patterns and Ecosystem Responses
1:20 - 1:40 PM	Influence of host tree species on ecosystem response to bark beetle outbreaks in subalpine forests of the Greater Yellowstone Ecosystem Affiliation: University of Wisconsin-Madison Zoology Department Authors: <i>Jacob Griffin, Martin Simard, Monica Turner</i>
1:40 - 2:00 PM	Lessons from an applied mountain pine beetle model: Simple answers are important, interesting questions remain Affiliation: University of Toronto Authors: <i>Josie Hughes, Marvin Eng, Andrew Fall, Marie-Josée Fortin, Adrian Walton, Terry Shore, Bill Riel</i>
2:00 - 2:20 PM	A new approach to mapping subtle insect-related mortality and recovery dynamics in mesic and dry conifer forests Affiliation: USDA Forest Service PNW Research Station Author: <i>Robert Kennedy</i>

TECHNICAL PRESENTATIONS *Continued...*

2:20 - 2:40 PM	Spatial patterns of bark beetle disturbance in the Greater Yellowstone Ecosystem Affiliation: University of Wisconsin-Madison Authors: <i>Suming Jin, Philip Townsend, Martin Simard, Jacob Griffin</i>
2:40 - 3:00 PM	Disturbance severity and post-disturbance biomass recovery in western subalpine forests: A comparison of bark beetle outbreaks and wildfires Affiliation: University of Wisconsin - Madison Authors: <i>Martin Simard, Jacob Griffin, Philip Townsend, Suming Jin</i>
Hall of Ideas G	Landscape Ecology and Geospatial Science for Sustainable Development and Poverty Alleviation in Developing Countries
1:20 - 1:45 PM	Landscape ecologists can have an important role in poverty alleviation Affiliation: Northern Research Station, USDA Forest Service Author: <i>Louis Iverson</i>
1:45 - 2:10 PM	Landscape ecology and sustainable development in African countries Affiliation: Department of Geography/Geology Author: <i>Henry Bulley</i>
2:10 - 2:35 PM	Sustainable development on the African continent: Understanding the stakeholders and participants in building the capacity for a sustained future in Africa Affiliation: Fayetteville State University Author: <i>Valentine James</i>
2:35 - 3:00 PM	Poverty and landscape fragmentation Affiliation: Purdue University Authors: <i>Bryan Pijanowski, Jennifer Olson, Sergiu Budesteanu</i>
Hall of Ideas I	Landscape Patterns and Ecosystem Processes: The Role of Human Societies
1:20 - 1:45 PM	Aesthetic landscapes of the golden mouse Affiliation: Eugene P Odum School of Ecology, University of Georgia Authors: <i>Terry Barrett, Gary Barrett</i>
1:45 - 2:10 PM	Biosemitic mechanisms as drivers in the interactions between human societies and ecosystem services Affiliation: Urbino University Author: <i>Almo Farina</i>
2:10 - 2:35 PM	Diversifying a corn-soybean landscape with alternative land covers and land use practices Affiliation: University of Minnesota, Landscape Architecture Authors: <i>Laura Musacchio, Nicholas Jordan, Anna Claussen, Peter Hinck, Peter Gillitzer, Linda Meschke</i>
2:35 - 3:00 PM	Successful preservation of valuable agricultural landscapes implies cooperation with "local partners:" Experiences from Norway Affiliation: Norwegian Inst. for Agricultural and Environmental Research Author: <i>Ann Norderhaug</i>
Hall of Fame	Water in the Landscape 2
1:20 - 1:40 PM	Hydrology and plant community alterations in wetlands in the Cuyahoga Valley National Park Affiliation: University of Toledo Department of Environmental Science Author: <i>Nathan Manning</i>
1:40 - 2:00 PM	Quantifying wetland dynamics and hydrologic function in the Prairie Pothole Region Affiliation: Independent Contractor to the U.S. Geological Survey Authors: <i>Christopher Wright, Jennifer Rover, Bruce Wylie, Ned Euliss</i>

WEDNESDAY TECHNICAL PRESENTATIONS *Continued...*

2:00 - 2:20 PM	Associations of stream water acidity and other environmental factors with the spatial distribution of brown trout in a mesoscale boreal stream network Affiliation: University of Wisconsin Authors: <i>Ishi Buffam, Ignacio Serrano, Kevin Bishop, Hjalmar Laudon</i>
3:20 – 5:00 PM Hall of Ideas J	Connectivity
3:20 - 3:40 PM	Exotic plant species invasion of roadsides in southern Illinois: A comparison between active and abandoned roadsides Affiliation: Department of Plant Biology - SIUC Authors: <i>Jason Inczauskis, Loretta Battaglia, David Gibson</i>
3:40 - 4:00 PM	Road density and land use dynamics in Brazilian Atlantic Forest Affiliation: University of São Paulo Authors: <i>Simone Freitas, Jean Paul Metzger, Todd Hawbaker, Ana Maria Teixeira</i>
4:00 - 4:20 PM	The role of landscape permeability for stone marten's conservation: Patch occupancy and road mortality risk Affiliation: Environmental Biology Centre, Lisbon University Authors: <i>Fernando Ascensao, Clara Grilo, John Bissonette, Margarida Santos-Reis</i>
4:20 - 4:40 PM	Functional connectivity for forest-dependent terrestrial birds in a fragmented landscape, Matiguás, Nicaragua Affiliation: CATIE Graduate School Authors: <i>María Martínez Salinas, Bryan Finegan, Fabrice DeClerck, Joel Sáenz, Sergio Velásquez</i>
4:40 - 5:00 PM	State-dependent patch selection and landscape connectivity Affiliation: University of Alberta Authors: <i>Darcy Visscher, Evelyn Merrill</i>
Hall of Fame	Disease
3:20 - 3:40 PM	Early detection of emerging forest disease using dispersal estimation and ecological niche modeling Affiliation: University of North Carolina at Charlotte Authors: <i>Ross Meentemeyer, Brian Anacker, Walter Mark, David Rizzo</i>
3:40 - 4:00 PM	Coupling graph-theoretic and cellular automaton models for simulating disease spread in fragmented forests Affiliation: University of Maryland Center for Environmental Science Authors: <i>Joseph Ferrari, Todd Lookingbill</i>
4:00 - 4:20 PM	Changes in natural enemy populations across an urban to rural landscape gradient Affiliation: University of Wisconsin Authors: <i>Ashley Bennett, Claudio Gratton</i>
Hall of Ideas F	Diversity
3:20 - 3:40 PM	Beta diversity across a fragmented landscape Affiliation: University of Maryland Center for Environmental Science Authors: <i>Samantha Tessel, Katharina Engelhardt</i>
3:40 - 4:00 PM	The stabilizing effect of spatial dynamics Affiliation: University of Maryland Center for Environmental Science Authors: <i>Robert Gardner, Katharina Engelhardt</i>
4:00 - 4:40 PM	Landscape-scale patterns in plant species richness and vegetation cover in relation to topography and permafrost in central Alaska Affiliation: Department of Forest and Wildlife Ecology, UW-Madison Authors: <i>Véronique St-Louis, Anna Pidgeon, Volker Radeloff</i>

TECHNICAL PRESENTATIONS *Continued...*

4:20 - 4:40 PM	At which scale does habitat heterogeneity matters for avian biodiversity? A case study for the Loggerhead Shrike in the Chihuahuan Desert of New Mexico Affiliation: Department of Forest and Wildlife Ecology, UW-Madison Authors: <i>Véronique St-Louis, Anna Pidgeon, Volker Radeloff</i>
Hall of Ideas H	Forest Landscapes
3:20 - 3:40 PM	Modeling ecological restoration and fuels reduction strategies for the forests of the Border Lakes Region Affiliation: The Nature Conservancy Authors: <i>Douglas Shinneman, Meredith Cornett, Brian Palik</i>
3:40 - 4:00 PM	A description of a weather generator (TAM-WG) for ecological modeling Affiliation: Knowledge Engineering Laboratory, Department of Entomology Authors: <i>Andrew Birt, Richard Feldmana, Martin Valdez-Vivaz, Charles Lafon, David Cairns, Weimin Xi, Maria Tchakerian, Robert Coulson</i>
4:00 - 4:20 PM	Bioclimatic mapping in Great Smoky Mountains National Park: Incorporating fine-scale topographic and soil moisture heterogeneity Affiliation: Ohio University Author: <i>James Dyer</i>
4:20 - 4:40 PM	Changes in forest fragmentation due to reforesting abandoned farmlands in Eastern Europe Affiliation: University of Wisconsin-Madison Authors: <i>Volker Radeloff, Tobias Kuemmerle, Patrick Hostert, Jacek Kozak, Peter Vogt</i>
4:40 - 5:00 PM	Spatial variability in ash regeneration as a predictor of ash recovery following mortality caused by the emerald ash borer in southeastern Michigan Affiliation: Wayne State University Authors: <i>Daniel Kashian, John Witter</i>
Hall of Ideas G	Landscape Ecology and Geospatial Science for Sustainable Development and Poverty Alleviation in Developing Countries
3:20 - 3:45 PM	Soil moisture monitoring for Sustainable Water Resources Management in southern Africa Affiliation: Institute of Photogrammetry and Remote Sensing (I.P.F.) Author: <i>Annett Bartsch</i>
3:45 - 4:10 PM	Training graduate students to understand sustainable development and biodiversity conservation over a landscape in northwest Yunnan, China Affiliation: IGERT Author: <i>Terilyn Allendorf</i>
4:10 - 4:35 PM	Form and function: Integrating landscape ecology and the Millennium Development Goals in managed landscapes Affiliation: CATIE, Department of Agriculture and Agroforestry Authors: <i>Fabrice DeClerck, Muhammad Ibrahim, Cheryl Palm, Pedro Sanchez</i>
4:35 - 4:55 PM	Discussion
Hall of Ideas E	Landscape genetics
3:20 - 3:40 PM	At the intersection of landscape, genetics, and ecology: Community phylogenetics at multiple scales Affiliation: North Carolina State University Author: <i>Kevin Potter</i>
3:40 - 4:00 PM	Landscape genetics of the Columbia Spotted Frog in northern Idaho, USA Affiliation: University of Idaho Authors: <i>Caren Goldberg, Lisette Waits</i>

WEDNESDAY TECHNICAL PRESENTATIONS *Continued...*

4:00 - 4:20 PM	Understanding landscape-genetic relationships in animals: Is landscape resistance all that matters? Affiliation: University of Idaho Authors: <i>Niko Balkenhol, Lisette Waits</i>
4:20 - 4:40 PM	The relative effects of habitat loss and fragmentation on population genetic structure Affiliation: Helmholtz Centre for Environmental Research Authors: <i>Doug Bruggeman, Thorsten Wiegand, Néstor Fernández</i>
4:40 - 5:00 PM	Application of gravity models to landscape genetics: A case study of Columbia Spotted Frogs (<i>Rana luteiventris</i>) in the Bighorn Crags Idaho, USA Affiliation: Washington State University Authors: <i>Melanie Murphy, Ray Dezzani, David Pilliod, Robert Klaver, Charles Peterson, Andrew Storfer</i>
Hall of Ideas I	Landscape Patterns and Ecosystem Processes: The Role of Human Societies
3:20 - 3:45 PM	Restoring the maintenance of satoyamas by utilizing harvested organic materials as a biomass resource Affiliation: Graduate School of Frontier Sciences, University of Tokyo Authors: <i>Makoto Yokohari, Toru Terada</i>
3:45 - 4:10 PM	Landscape patterns of grassland ecosystem reflects historic land-use organisation and management: Examples from Sweden Affiliation: Stockholm University, Department of Physical Geography Author: <i>Margareta Ihse</i>
4:10 - 4:35 PM	Investigating the origin and intensity of human control on forest patches in highly-fragmented landscapes Affiliation: Department of Plant Sciences, University of Cambridge Authors: <i>Raffaele Laforetza, Robert Corry, David Coomes</i>
4:35 - 5:00 PM	Discussion

POSTER PRESENTATIONS

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

Disturbance

1	<i>A Comparison of Circular Anomalies from an Historical Arkansas Landscape</i> Affiliation: USDA Forest Service, Southern Research Station Authors: <i>Don Bragg, Robert Weih</i>
2	<i>Plant Community Succession Following Natural and Anthropogenic Disturbance Events in Great Basin Pinyon-juniper Woodlands</i> Affiliation: Dept. of Natural Resources & Env. Sci., Univ. Nevada, Reno Authors: <i>Nathan Bristow, Peter Weisberg, Robin Tausch</i>
3	<i>Understory vegetation response to timber harvest in the Black Hills, South Dakota, USA</i> Affiliation: South Dakota State University Authors: <i>Stefanie Wacker, Jack Butler, Michael Wimberly</i>
4	<i>Modeling effects among fire, windstorms and yellow pine regeneration following southern pine beetle outbreaks in the southern Appalachians</i> Affiliation: Texas A&M University Authors: <i>Weimin Xi, Charles Lafon, David Cairns, John Waldron, Andrew Birt, Maria Tchakerian, Robert Coulson, Kier Klepzig</i>

Ecosystem Management

5	<i>The effect of lopping on long-term forest succession in Garhwal Himalaya, India</i> Affiliation: University of Michigan Author: <i>Yuka Makino</i>
6	<i>Interactions between grassland birds and their snake predators: The potential for conservation benefits or conflicts in the tallgrass prairie</i> Affiliation: Kansas State University Authors: <i>Page Klug, Kimberly With</i>
7	<i>Impact of perennial natural habitats on predation of herbivorous crop pests at plot, field and landscape scales</i> Affiliation: University of Wisconsin Authors: <i>Ben Werling, Claudio Gratton</i>
8	<i>Impact of landscape heterogeneity on soybean aphid and natural enemy abundance in Jasper County, Iowa</i> Affiliation: Iowa State University Authors: <i>Nicholas Schmidt, Matthew O'Neal, Lisa Schulte</i>

Conservation Planning

9	<i>Modeling military training as an integrated approach to endangered species management on military lands in west-central, Wisconsin</i> Affiliation: Dept of Geography and Environmental Engineering Authors: <i>Mark Smith, John Cary, Monica Turner</i>
10	<i>Using ecological and socio-economic data to site marine protected areas: Calculating the cost function and its influence on results for Glacier Bay, Alaska</i> Affiliation: University of Alaska Fairbanks Authors: <i>Susan Hazlett, Falk Huettmann, Alan Springer</i>
11	<i>Implications of social and ecological gradients for conservation planning in large, multi-ownership, forested landscapes</i> Affiliation: PNW Research Station, USDA Forest Service Authors: <i>Janet Ohmann, Jeffrey Kline, Ralph Alig, Matthew Gregory</i>
12	<i>Population viability impacts of habitat additions and subtractions: A simulation experiment with endangered kangaroo rats</i> Affiliation: University of Calgary Authors: <i>Julie Heinrichs, Darren Bender, David Gummer, Nathan Schumaker</i>

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

13	<p><i>Prioritizing Pacific salmon conservation across multiple spatial scales</i> Affiliation: Wild Salmon Center Authors: Tom Miewald, Gordon Reeves, Greg Block, Christina Friedle</p>
14	<p><i>Applying habitat suitability indices toward landscape-scale planning for Wisconsin's avian species of greatest conservation need</i> Affiliation: University of Wisconsin-Madison Authors: Frederic Beaudry, Anna Pidgeon, Volker Radeloff, David Mladenoff</p>
15	<p><i>A simulation comparing spatially-explicit riparian restoration strategies for water quality improvement within and among watersheds</i> Affiliation: Utah State University Authors: Molly Van Appledorn, Matthew Baker</p>
Forest Landscapes	
16	<p><i>Tropical cloud forest ecotone characteristics vary along a secondary climate gradient</i> Affiliation: University of Wisconsin, Department of Botany Authors: Shelley Crausbay, Sara Hotchkiss</p>
17	<p><i>Modeling the spatially explicit animal response to composition of habitat (SEARCH): Considering the importance of behavior</i> Affiliation: Purdue University Authors: Benjamin Pauli, Nicholas McCann, Robert Cummings, Patrick Zollner</p>
18	<p><i>Dynamics of structure and composition in an old growth temperate rainforest stand, Southwest British Columbia</i> Affiliation: BC Ministry of Forests and Range Authors: Sari Saunders, Andy MacKinnon, Paul Alaback</p>
19	<p><i>The inferential nature of constructing landscape-level simulation models: An example from a managed forest landscape</i> Affiliation: Michigan State University Authors: James Millington, Joseph LeBouton, Michael Walters, Kimberly Hall, Megan Matonis, Edward Laurent, Jianguo Liu</p>
20	<p><i>Extracting meaningful pattern information from large real-world datasets: Lessons from the EOSD Canada forest land cover</i> Affiliation: Universite de Montreal Authors: Tara Holland, Jeffrey Cardille, Michael Wulder, Joanne White, Nicholas Coops</p>
21	<p><i>How will the changing industrial forest landscape affect forest sustainability?</i> Affiliation: Northern Research Station, USDA Forest Service Authors: Sue Lietz, Eric Gustafson, Craig Loehle</p>
22	<p><i>Composition and diameter differences between line and corner trees in the General Land Office (GLO) Survey data for northern Michigan, USA</i> Affiliation: Michigan Technological University Authors: Kimberley Brososfske, David Cleland, Sari Saunders, Ann Maclean</p>
23	<p><i>Paleoecological perspective on landscape scale vegetation patterns on the northwestern Wisconsin sand plain: How representative is pre-European settlement vegetation of the last 2000 years?</i> Affiliation: University of Wisconsin Authors: Sara Hotchkiss, Randy Calcote, Elizabeth Lynch</p>
24	<p><i>Innovative, immersive and interactive techniques for visualizing, querying, and understanding regional maps of forest vegetation</i> Affiliation: Oregon State University Authors: Matthew Gregory, Janet Ohmann, Timothy Holt</p>
25	<p><i>Landscape factors influence population connectivity in the forest insect <i>Choristoneura fumiferana</i></i> Affiliation: Purdue University North Central Authors: Vanessa Quinn, Gladys Andino, Dean Anderson, Brian Sturtevant</p>

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

26	<p><i>Influence of forest management on spatial patterns of exotic earthworm abundance in a second-growth northern hardwood forest</i> Affiliation: University of Wisconsin - Madison Authors: Jodi Forrester, Erika Latty, David Mladenoff</p>
Landscape Change	
27	<p><i>Landscapes of inequality: Effects of land ownership on the shifting cultivation mosaic in the Peruvian Amazon, 1965-2007</i> Affiliation: McGill University Authors: Jeanine Rhemtulla, Oliver Coomes</p>
28	<p><i>Patterns of change in African savannas</i> Affiliation: University of Florida Author: Cerian Gibbes</p>
29	<p><i>Butterfly movement in a post agricultural landscape</i> Affiliation: Stony Brook University Author: Norah Warchola</p>
30	<p><i>Projecting the future for sage-grouse under alternative energy development scenarios</i> Affiliation: The Nature Conservancy Authors: Holly Copeland, Tom Christiansen, Kevin Doherty, David Naugle, Amy Pocerwicz, Brian Rutledge, Tom Rinkes, Joseph Kiesecker</p>
31	<p><i>Spatial simulation of historical landscape patterns in mountain sagebrush dominated landscapes of Utah and Nevada</i> Affiliation: University of Nevada Reno Authors: Zach Nelson, Peter Weisberg, Stanley Kitchen, Dongwook Ko</p>
32	<p><i>Historic vegetation composition and structure at the prairie-forest border in northeastern Iowa</i> Affiliation: Luther College Authors: Elizabeth Lynch, Stephanie Tomscha, Lisa Schulte</p>
33	<p><i>Landscape memory: Continuity and discontinuity in landscape development trajectories (case study from Czech-German borderland)</i> Affiliation: Department of Geography, J E Purkinje University Authors: Martin Balej, Tomas Orsulak</p>
34	<p><i>Odor landscapes in deep time</i> Affiliation: University of Illinois at Chicago Author: Roy Plotnick</p>
35	<p><i>Land use/land cover change in and around protected areas: Rates of change, trends and management implications for the Great Lakes region</i> Affiliation: UW Madison, Department of Forest and Wildlife Ecology Authors: Urs Gimmi, Shelley Schmidt, Ulf Gafvert, Volker Radeloff</p>
36	<p><i>People in Ecosystems / Watershed Integration (PE/WI): A tool for teaching tradeoffs in agricultural land use</i> Affiliation: Iowa State University - NREM Authors: James Donahey, Lisa Schulte, Ryan Atwell</p>
37	<p><i>Creating and analyzing digital land parcelization histories to better understand landscape change</i> Affiliation: Center for Land Use Education, UW-Stevens Point Authors: Timothy Kennedy, Dan McFarlane</p>
38	<p><i>The transition of rural landscapes in the urban fringe area: A case study of the Kanto Plain, Japan</i> Affiliation: National Institute for Rural Engineering Authors: Hideharu Kurita, Makoto Yokohari</p>

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

Remote Sensing

39	<i>A multi-scale approach to remote determination of forest canopy size in Minnesota using SPOT, ASTER, and Landsat</i> Affiliation: University of Wisconsin - Madison Authors: Peter Wolter, Philip Townsend
40	<i>Evaluating the impact of phenological variation on texture measures of remotely-sensed imagery</i> Affiliation: UW-Madison, Dept. of Forest and Wildlife Ecology Authors: Patrick Culbert, Anna Pidgeon, Véronique St-Louis, Dallas Bash, Volker Radeloff
41	<i>Mapping forest attributes in southwestern Ohio using multispectral and hyperspectral satellite data</i> Affiliation: Miami University Authors: John Maingi, Thomas Crist
42	<i>Tree cover loss estimations in the boreal forests using MODIS time-series data sets</i> Affiliation: Geographic Information Science Center of Excellence, SDSU Authors: Peter Potapov, Matthew Hansen, Stephen Stehman, Thomas Loveland, Kyle Pittman
43	<i>Hierarchical stratified sampling optimizes forest structure maps derived from LiDAR data</i> Affiliation: University of Wisconsin Authors: Todd Hawbaker, Adrian Lesak, Volker Radeloff
44	<i>Mapping and monitoring the world's intact forest landscapes by remote sensing</i> Affiliation: Geographic Information Science Center of Excellence, SDSU Authors: Peter Potapov, Svetlana Turubanova, Maxim Dubinin, Lars Laestadius, Aleksey Yaroshenko, Dmitry Aksenov

Scaling

45	<i>Sensitivity of carnivores to habitat fragmentation from a multi-scale perspective</i> Affiliation: Centro de Biología Ambiental Authors: Clara Grilo, Marta Cruz, John Bissonette, Margarida Santos-Reis
46	<i>Linking plots to landscapes: A synthetic framework for monitoring change in the Great Basin Ecosystem</i> Affiliation: U.S. Geological Survey Authors: Alicia Torregrosa, Andrea Woodward, David Miller, David Bedford, David Pilliod, Marie Denn
47	<i>Hierarchical models for hierarchical scales: Alternative statistical models of land use influences on aquatic integrity</i> Affiliation: Colorado State University Authors: Alisa Wade, Jennifer Hoeting
48	<i>Scaling up water use efficiency in semi-arid ecosystems of Inner Mongolia from plot level to regional scales</i> Affiliation: Department of Environmental Sciences, University of Toledo Authors: Ranjeet John, Nan Lu, Jiquan Chen, Burkhard Wilske
49	<i>Treeline dynamics: Pattern and process at multiple spatial scales</i> Affiliation: Lincoln University Authors: Melanie Harsch

Spatial Analysis

50	<i>Malaria patterns and hydrology in the Amazon: Will land use and cover changes alter risk?</i> Affiliation: University of Wisconsin - Madison Authors: Sarah Olson, Laurent Durieux, Eric Elguero, Jonathan Foley, Ron Gagnon, Jean-François Guegan, Jonathan Patz
51	<i>Determining landscape-scale Lyme disease risk patterns in the Mid Atlantic Region, USA</i> Affiliation: University of Wisconsin - Madison Authors: Sarah Olson, Jeffrey Cardille, Murray Clayton, Joseph Bunnell, Scott Heckle, Jonathan Patz

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

52	<i>Landscape fragmentation in coastal temperate rainforest watersheds</i> Affiliation: University of British Columbia Authors: <i>Shanley Thompson, Sarah Gergel, Robert D, Jeffrey Cardille</i>
53	<i>Predicting land surface properties based on land cover heterogeneity at the regional scale: a case study in the semiarid Inner Mongolia</i> Affiliation: University of Toledo Authors: <i>Nan Lu, Ranjeet John, Jiquan Chen</i>
54	<i>Landscape heterogeneity and plant species richness in the Southeastern US</i> Affiliation: University of North Carolina-Chapel Hill Authors: <i>Jennifer Costanza</i>
55	<i>A predictive model for tallgrass prairie remnant distribution in the Southwest Grasslands Area of Wisconsin</i> Affiliation: Department of Landscape Architecture, UW - Madison Authors: <i>Alexandra Wells, John Harrington</i>
56	<i>The validity of landscape metrics in expressing spatial patterns</i> Affiliation: Peking University Authors: <i>Jian Peng, Yanglin Wang, Yuan Zhang, Jiansheng Wu</i>
57	<i>New approaches for representing spatial variability and uncertainty in watershed connectivity</i> Affiliation: Utah State University Authors: <i>Matthew Baker, David Tarboton</i>
58	<i>Comparing two spatial models in deriving the probability of cloud cover in north-eastern Puerto Rico</i> Affiliation: University of Southern Mississippi Authors: <i>Wei Wu, Lianjun Zhang, Charles Hall</i>
59	<i>Variability and inconsistency of the historic land survey records in Wisconsin</i> Affiliation: University of Wisconsin-Madison Authors: <i>Feng Liu, David Mladenoff, Nicholas Keuler, Lisa Schulte</i>
60	<i>The influence of landscape fragmentation on plant diversity and productivity within the southeastern United States</i> Affiliation: UNC-Chapel Hill Department of Geography Author: <i>Dahl Winters</i>
Agriculture	
61	<i>The Conservation Reserve Program and grassland birds: The influence of practice type, configuration and contract age</i> Affiliation: Mississippi State University Authors: <i>Sam Riffell, Daniel Scognamillo, Wes Burger, Shawn Bucholtz</i>
62	<i>Cultural landscapes and regional identities: Greenhouses and regional identities in Kumamoto, Japan</i> Affiliation: The University of Tokyo Authors: <i>Yosuke Watanabe, Makoto Yokohari, Mototsugu Ochiai</i>
63	<i>Carnivores in the farmland matrix: Use of avocado orchards depends on neighboring land use types</i> Affiliation: University of California Santa Barbara Authors: <i>Theresa Nogeire, Frank Davis, John Orrock</i>
64	<i>Trace of agricultural landscape pattern in Rangsit, Thailand</i> Affiliation: University of Tokyo Authors: <i>Vudipong Davivongs, Makoto Yokohari</i>

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

Urban and Urbanizing Landscapes

65	<p><i>U.S. residential housing growth: Trends and patterns around National Parks and National Wildlife Refuges</i> Affiliation: University of California, Santa Barbara Authors: <i>Patrick Jantz, Frank Davis</i></p>
66	<p><i>The spatial relationship between urban green patches and topography in a suburban area of Tokyo, Japan</i> Affiliation: The University of Tokyo Authors: <i>Mariko Miyamoto, Makoto Yokohari</i></p>
67	<p><i>Spatial-temporal dynamic of an urban landscape: Shenzhen as Hong Kong's rival in mainland China</i> Affiliation: The University of Toledo Authors: <i>Chongfeng Gong, Jiquan Chen, Shixiao Yu</i></p>
68	<p><i>Virtual landscapes in landscape ecological research: Foreign experiences and our visions (case study from Czech-German borderland)</i> Affiliation: Department of Geography Faculty of Science J E Purkinje Uni Authors: <i>Tomas Orsulak, Martin Balej</i></p>
69	<p><i>The effect of the demolition exercise in the Federal Capital Territory Abuja Nigeria</i> Affiliation: Agric Link Multipurpose Cooperative Society Limited Authors: <i>Michael Adedotun</i></p>

Fire

70	<p><i>Reconstructing historical fire regimes at a Mojave Desert springs complex</i> Affiliation: Dept. of Nat. Resources & Env. Science, Univ. Nevada, Reno Authors: <i>Stephanie Sunderman, Peter Weisberg, Sarah Ganschow</i></p>
71	<p><i>Methods for estimating fuel treatment effectiveness: Modeling the Camp 32, School, and Warm Wildfires using FARSITE</i> Affiliation: Geographic Information Science Center of Excellence Authors: <i>Adam Baer, Mark Cochrane, Michael Wimberly</i></p>
72	<p><i>Reconstructing trend in area burned in arid grasslands of Southern Russia using AVHRR and MODIS data</i> Affiliation: University of Wisconsin Authors: <i>Maxim Dubinin, Peter Potapov, Anna Lushchekina, Volker Radeloff</i></p>
73	<p><i>Spatial patterns of canopy mortality following a large wildfire in Oregon: Does fire severity differ between riparian zones and uplands?</i> Affiliation: USDA Forest Service, PNW Research Station Authors: <i>Thomas Spies, Jonathan Thompson, Keith Olsen</i></p>
74	<p><i>Variables facilitating conifer to deciduous vegetation transition during post-fire succession in the Alaska boreal region</i> Affiliation: Penn State University Authors: <i>Jared Oyler, Erica Smithwick, Michelle Mack</i></p>

Arid Landscapes

75	<p><i>Consequences of land use change in semi-arid to arid Central Eurasia</i> Affiliation: South Dakota State University/GIScCE Authors: <i>Geoffrey Henebry, William Capehart, Kirsten de Beurs, Elena Lioubimtseva</i></p>
76	<p><i>Patch size distribution in semi-arid grassland in central New Mexico: Mechanisms and implications to ecosystem dynamics</i> Affiliation: Department of Biology, University of New Mexico Authors: <i>Etsuko Nonaka, Scott Collins, Selene Baez, Melanie Moses</i></p>

POSTER PRESENTATIONS *Continued...*

Monday, April 7th

5:00 PM - 7:00 PM

Grand Terrace

Carbon and Climate Change

77	<p><i>The Carbon-Land Model Intercomparison Project: A protocol and metrics for global biosphere models</i> Affiliation: Oak Ridge National Laboratory Authors: Forrest Hoffman, James Randerson, Inez Fung, Peter Thornton</p>
78	<p><i>Assessing carbon pools and fluxes at landscape-scales: The importance of tree age and disturbance history in subalpine Rocky Mountain forests</i> Affiliation: USFS Northern Research Station Authors: John Bradford, Michael Ryan, Richard Birdsey, Linda Joyce</p>
79	<p><i>The USA National Phenology Network: Towards an integrative assessment of global change impacts at the national scale</i> Affiliation: USA National Phenology Network, National Coordinating Office Authors: Mark Losleben, Jake Weltzin</p>

Species Distributions

80	<p><i>Toward a unified framework for interpreting the consequences of ecological and evolutionary traps</i> Affiliation: University of Florida Authors: Robert Fletcher, John Orrock, Bruce Robertson</p>
81	<p><i>Spatial and temporal avian species distribution and richness trends in North America</i> Affiliation: Purdue University Authors: Brian Napolitano, Jonah Duckles, Bryan Pijanowski</p>
82	<p><i>Bird ranges shifting polewards in New York state</i> Affiliation: SUNY College of Environmental Science and Forestry Authors: Benjamin Zuckerberg, Anne Woods, William Porter</p>
83	<p><i>Modeling occupancy of American Marten (<i>Martes americana</i>) accounting for spatial explicit variables</i> Affiliation: Dept. of Forestry and Natural Resources, Purdue University Authors: ChiaChun (Tricia) Tsai, Patrick Zollner, Jonathon Gilbert, Bronwyn Williams, Kim Scribner, Timothy White, Jim Woodford, Daniel Eklund</p>
84	<p><i>Influence of watershed morphometry on the distribution of riparian vegetation: A multi-scale analysis</i> Affiliation: Dept Nat Res & Env Sci, University of Nevada, Reno Authors: Blake Engelhardt, Peter Weisberg, Jeanne Chambers</p>
85	<p><i>Response of songbirds to willow habitat structure across two regions of the Greater Yellowstone Ecosystem</i> Affiliation: Iowa State University Authors: Brian Olechnowski, Diane Debinski</p>
86	<p><i>Spatial variability of riparian zone plant species in western Washington</i> Affiliation: University of Toledo Authors: Jessica Schaefer, Jiquan Chen, Kimberley Brososke</p>
87	<p><i>Landscape features and the dispersion of the invasive tree glossy privet (<i>Ligustrum lucidum</i>) in central Argentina</i> Affiliation: University of Wisconsin-Madison Authors: Gregorio Gavier Pizarro, Susan Stewart, Volker Radeloff</p>
88	<p><i>Eradication success of <i>Alliaria petiolata</i> near an ephemeral tributary</i> Affiliation: University of Wisconsin - Parkside Authors: Joy Wolf, C Coleman, J Grove, M Stanton, J Nutter</p>

PLENARY ABSTRACTS

Watersheds as Landscape Systems: How Much Do We Need to Know? **Monday, April 7, 8:30-9:30 AM**

Gary M. Lovett,
Cary Institute of Ecosystem Studies
Box AB, Millbrook, NY 12545
LovettG@ecostudies.org

Ecosystems are usually defined by their spatial homogeneity, while landscapes are often characterized by their spatial heterogeneity. To apply the ecosystem concept to landscapes, it is helpful to view the landscape as a system composed of multiple interacting ecosystems arranged spatially. The landscape system is subject to same mass balance constraints as is each component ecosystem. How much do we need to know about the internal workings of landscape systems in order to understand their functioning? Watersheds are a useful tool for evaluating this question because there are convenient measures of some aspects of whole-system function—particularly water and nutrient balances. In this talk I will examine three conceptual models of watershed structure—homogeneous, mosaic, and interactive—and discuss when each model is useful and when it is not.

Landscape Function and Dysfunctional Landscapes: Uncoupling Pattern from Process **Tuesday, April 8, 8:30-9:30 AM**

Kimberly A. With
Division of Biology
Kansas State University, Manhattan, KS 66506
kwith@ksu.edu

Landscape and ecosystem function are inextricably linked, to the point that they have become practically synonymous in common usage. Landscapes obviously provide the spatial context for ecosystem processes, but beyond that, what function(s) do landscapes have and how do landscapes function? As a discipline, landscape ecology has distinguished itself from other areas of ecology by its focus on how spatial pattern affects ecological process. Landscape function thus needs to be assessed in terms of the ability to sustain flows of energy, nutrients, information or organisms across a heterogeneous or spatially distributed system. The connectivity of a landscape is therefore one measure of landscape function. Landscape dysfunction results from either the disruption of ecological flows across the landscape, or conversely, from the excessive flow of nutrients and organisms across, and ultimately from, the landscape. This suggests that there is some critical scale at which landscapes achieve optimum functioning, which perhaps reflects the organizing properties of the landscape itself, in terms of how the various formative processes interact to generate and maintain spatial structure and heterogeneity at the landscape scale. Landscape dysfunction may also arise through the simplification or homogenization of landscapes. Habitat is increasingly viewed as an essential function of ecosystems and thus landscapes, given that the structure and availability of habitat is essential for maintaining biodiversity, and thus the capacity of ecosystems to resist or recover from disturbance. Habitat loss and fragmentation pose the biggest threats to the maintenance of biodiversity, and therefore to landscape function. As landscape function becomes compromised through habitat loss and fragmentation, ecological thresholds may be exceeded producing dramatic—and often unexpected—shifts in system states that in some cases are irreversible. The disruption of landscape function ultimately results in the uncoupling of ecological processes from landscape pattern, which is especially evident in the case of past land-use legacies (the ghosts of landscapes past) or where the current rate of landscape transformation exceeds the recovery time of the system, leading to lagged responses (e.g., extinction debts). Through the creation of dysfunctional landscapes, humans have fueled a biodiversity crisis of epic proportions, and have eroded ecosystem goods and services and thus the capacity of landscapes to support viable populations and other vital ecological support systems. By identifying when landscapes become dysfunctional, when pattern and process have become uncoupled, landscape ecology can provide the defining criteria and framework for managing this most significant and urgent of global change problems.

PLENARY ABSTRACTS *Continued...*

Change in Madison's Watersheds and Lakes **Banquet Speaker—Tuesday, April 8, 6-9 PM**

Steve Carpenter

University of Wisconsin Center for Limnology
Madison, WI 53706-1492
srcarpen@wisc.edu

Visitors to IALE will notice that lakes are the most conspicuous natural feature of the region around Madison. The lakes were a nexus of activity for Native Americans, who established a rich mound-building culture long before the region was settled by Europeans. The natural beauty of the area, and effective politics by real-estate speculators, led to the founding of Madison as the capital of the new state of Wisconsin in 1836. Written accounts from the early years of Madison show that the lakes were clear. By 1870, most of the watershed was plowed, and noxious blooms of algae were common in summer. From about 1870 until the 1950s, the lakes received increasing flows of nutrients, loss of native plant, invertebrate and fish species, and invasions or introductions of several harmful species. Since the 1950s, a series of management actions has attempted to improve water quality and biota of the lakes, with a mix of failures and successes. The talk will provide a brief ecological history of the changes in the lakes due to human intervention, and a glimpse of environmental trends and management opportunities for the next few years.

Global Patterns of Land Use: Extensification and Intensification of Agriculture as a Force of Global Environmental Change **Wednesday, April 9, 8:30-9:30 AM**

Jonathan Foley

Center for Sustainability and the Global Environment
University of Wisconsin-Madison
1710 University Ave., Room 202A
Madison, WI 53726 USA
jfoley@wisc.edu

The massive expansion of agriculture, accelerating from the explosive population and consumption increases of recent decades, has already transformed ~40% of the Earth's land surface into croplands and pastures. The international research community has started to recognize the importance of these landscapes in the Earth System, especially in terms of our changing climate and carbon cycle. In particular, research efforts have focused on observing, documenting and modeling the expanding patterns of agricultural land use across the globe.

While the geographic expansion (or "extensification") of agriculture is now somewhat better understood, we have a much poorer understanding of the intensification of agricultural practices, often referred to as the "Green Revolution", and what they may mean for the planet. For example, the incredible increase in fertilizer use and irrigation in recent years has helped improve crop yields, and may have drastically affected water and nutrient balances across large regions of the globe. Furthermore, traditional cropping practices (e.g., shifting patterns of slash and burn agriculture) are being abandoned in many parts of the world, as more and more regions adopt industrialized agricultural practices.

In this presentation, I will review the changing global patterns of agricultural extensification and intensification, and their potential effects on environmental systems on regional and global scales.

PLENARY SPEAKER PROFILES

Gary Lovett Institute of Ecosystem Studies



Dr. Gary Lovett is a Senior Scientist at the Institute of Ecosystem Studies in Millbrook, NY. He received a bachelor's degree in Biology from Union College in Schenectady, NY. He abandoned a promising career as a bicycle mechanic to return to graduate school at Dartmouth College, where he received a Ph.D. in Biology in 1981. He was a Research Associate at Oak Ridge National Laboratory in Tennessee for several years, and in 1985 joined the staff of the Institute of Ecosystem Studies, a private research center focused on ecological science and education. He is also an adjunct professor in ecology at Rutgers University and the University at Albany, and a member of the Graduate Program in Biogeochemistry and Environmental Biocomplexity at Cornell University. He is the chairman of the Northeastern Ecosystem Research Cooperative, the principal scientific organization for ecosystem scientists in the Northeast. Dr. Lovett's research focuses primarily on the biogeochemistry of forested ecosystems, especially the effects of atmospheric deposition, exotic species and other stresses. His recent research on this subject has taken place in the Catskill Mountains and Hudson Valley of New York and in Maine, New Hampshire, and Tennessee.

Kimberly With Kansas State University



Dr. Kimberly With is an Associate Professor of Biology at Kansas State University. Her research has developed at the interface of landscape ecology and conservation biology, driven by a particular (and some would say, peculiar) interest in ecological threshold responses to habitat loss and fragmentation. More generally, her research has broadly considered the effect of landscape pattern on ecological process across a wide range of scales, from that encompassing the fine-scale individual movement responses of insects to heterogeneity within plots of a few square meters, to the effect of land-management practices on the regional viability of grassland birds in landscapes comprising several million hectares. She is a two-time recipient of the US-IALE "Outstanding Paper" award for contributions to the field of landscape ecology (in 1996 and again in 2002), and is currently the Americas Editor for Biological Conservation. The product of several prominent landscape ecologists, she received her Ph.D. from Colorado State University in 1993 and was awarded an Alexander Hollaender Distinguished Postdoctoral Fellowship (1993-1995) to work with the landscape ecology group at the Environmental Sciences Division of the Oak Ridge National Laboratory. The rest is history. Native to California, she has since returned to her ancestral roots in the Midwest, thereby single-handedly undoing several generations of westward migration.

PLENARY SPEAKER PROFILES *Continued...*

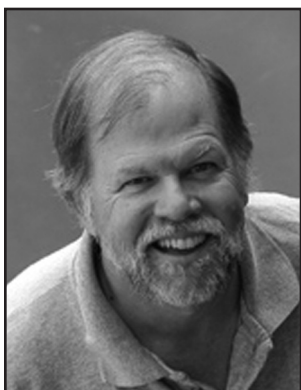
Jonathan Foley University of Wisconsin, Madison



Jonathan Foley is the Director of the Center for Sustainability and the Global Environment (SAGE) at the University of Wisconsin, where he is also the Gaylord Nelson Distinguished Professor of Environmental Studies and Atmospheric & Oceanic Sciences. Foley's work focuses on the behavior of complex global environmental systems and their interactions with human societies. In particular, Foley's research group uses state-of-the-art computer models and satellite measurements to analyze changes in land use, ecosystems, climate and freshwater resources across local, regional and global scales. He and his students and colleagues have contributed to our understanding of large-scale ecosystem processes, global patterns of land use, the behavior of the planet's water and carbon cycles, and the interactions between ecosystems and the atmosphere.

Foley joined the University of Wisconsin faculty in 1993 as the first Bryson Distinguished Professor of Climate, People and Environment. He has won numerous awards and honors, including the National Science Foundation's Faculty Early Career Development Award, the Samuel C. Johnson Distinguished Faculty Fellowship, the J.S. McDonnell Foundation's 21st Century Science Award, and the Sustainability Science Award from the Ecological Society of America. In 1997, President Bill Clinton awarded him the Presidential Early Career Award for Scientists and Engineers. He has also been named a Vilas Associate and Romnes Fellow of the University of Wisconsin, and an Aldo Leopold Leadership Fellow of the Ecological Society of America. He is currently the Chief Editor of the interdisciplinary scientific journal, *Earth Interactions*. Jon is originally from Maine, and has the B.S. and Ph.D. from the University of Wisconsin – Madison.

Steve Carpenter University of Wisconsin, Madison



Stephen R. Carpenter is the Stephen Alfred Forbes Professor of Zoology at the University of Wisconsin-Madison Center for Limnology. He directs the North Temperate Lakes Long-Term Ecological Research program, which studies regional change in two fast-growing regions of Wisconsin: the Northern Highlands at the northernmost tip of the state, and the Yahara Watershed around Madison. The projects integrate landscape ecology, hydrology, climate, biogeochemistry, and community ecology as well as economics and human demography. Carpenter's personal research focuses on regime shifts in ecosystems and their implications for managing resilience. He is co-Editor in Chief (with Monica Turner) of *Ecosystems*, a member of the U.S. National Academy of Sciences and the Royal Swedish Academy of Sciences, and a recipient of the Robert H. MacArthur Award from

the Ecological Society of America. Carpenter has published 4 books and over 300 scientific papers. He received a B.A. from Amherst College (1974) and the M.S. and Ph.D. from University of Wisconsin-Madison (1976, 1979). Steve joined the UW-Madison faculty in 1989. For more information see his web site at <http://limnology.wisc.edu/personnel/carpenter/>.

FOREIGN SCHOLAR TRAVEL AWARDS

US-IALE FOREIGN SCHOLAR TRAVEL AWARD PROGRAM

Sam Riffell, Committee Chair, Mississippi State University

Through the Foreign Scholar Travel program, the United States Regional Association of the International Association for Landscape Ecology (US-IALE) annually provides travel funds to landscape ecologists from foreign countries to present their research at the annual meeting. The FSTA program is not only an outreach effort, but also a mechanism that fosters international exchange about advances in landscape ecology and helps build collaborative relationships.

Foreign Scholars are selected based on several criteria: original and outstanding research in landscape ecology, financial need, and the contribution the award would make to their professional development. This year, we were pleased to grant a \$1,200 travel award to 2 promising, early-career landscape ecologists.

The FSTA program would not exist without the support of the US-IALE membership through donations from individuals and proceeds from the annual book auction. Generous contributions from the exhibitors, ESRI & Clark Labs have been critical to success of the auction. Please continue supporting the FSTA by participating in the book auction and patronizing the booksellers and exhibitors.

The FSTA committee for 2008 consisted of Sam Riffell (Committee Chair, Mississippi State University), Robert Corry (University of Guelph), Sarah Gergel (University of British Columbia), Nancy McIntyre (Texas Tech University), Martin Simard (University of Wisconsin), and Jianguo Wu (Arizona State University). Ex officio members: Robert Gardner (US-IALE President), Margaret Livingston (US-IALE Treasurer).

2008 US-IALE Foreign Scholar Travel Award Recipients

Jian Peng is a post-doctoral researcher in the College of Urban & Environmental Studies at Peking University. Jian will be presenting research about the performance of landscape metrics

Simone Freitas is a post-doctoral fellow in the Ecology Department at the University of Sao Paulo. Simone will be presenting research on roads and land use dynamics in the Brazilian Atlantic Forest.

NASA-MSU PROFESSIONAL ENHANCEMENT AWARDS PROGRAM

The NASA-MSU Professional Enhancement Awards are made possible by the support from the National Aeronautics and Space Administration (NASA) and Michigan State University (MSU). This is the 11th consecutive year of the program. The selected students have opportunities to meet with some leading landscape ecologists at a special dinner gathering, to learn the latest developments in landscape ecology, and to build professional networks with other conference attendees.

Each year, approximately 20 awards (up to \$700 each) are given for the selected students to cover expenses associated with attending the annual conference of US-IALE. Applications are judged according to the merit of the applicants' abstracts, professional background, career goals, and financial needs. There are 22 awardees this year (see the list below).

The 2008 NASA-MSU Awards Committee consists of Jianguo (Jack) Liu (Chair), Anita Morzillo (Co-Chair), Garik Gutman (NASA), Sherrie Lenneman (MSU), and Shuxin Li (MSU).

NASA-MSU Awardees (Class of 2008)

NAME	INSTITUTION
Barber, Christopher	South Dakota State University
Bolli, Jacqueline	Swiss Federal Research Institute WSL, Switzerland
Browning, Dawn	University of Arizona
Davis, Amélie	Purdue University
Davivongs, Vudipong	University of Tokyo, Japan
Gibbes, Cerian	University of Florida
Graves, Tabitha	Northern Arizona University
Hinners, Sarah	University of Colorado at Boulder
James, Patrick	University of Toronto, Canada
John, Ranjeet	University of Toledo
Klug, Page	Kansas State University
Lu, Nan	University of Toledo
Lumpkin, Heather	Bethel College
Miyamoto, Mariko	University of Tokyo, Japan
Nogeire, Theresa	University of California at Santa Barbara
Rayfield, Bronwyn	University of Toronto, Canada
Sanfiorenzo, Andre	Tropical Agricultural Research & Higher Education Center, Costa Rico
Tang, Wenwu	University of Iowa
Tuanmu, Mao-Ning	Michigan State University
VanAppledorn, Molly	Utah State University
Williams, Mary	University of Minnesota
Zuckerberg, Benjamin	SUNY College of Environmental Science and Forestry

EXHIBITORS

Springer Science & Business Media

Janet Slobodien
233 Spring St.
New York, NY 10013
212-460-1525
212-463-0742
janet.slobodien@springer.com
www.springer.com

Springer is a major publisher of books and journals in Landscape Ecology. Please stop by our booth to order books at a special conference discount and take a closer look at sample issues of journals. An editor will be on hand to answer any questions you might have about publishing with Springer.

Salford-Systems

Alice Tan
4740 Murphy Canyon Rd. #200
San Diego, CA 92123
619-543-8880
619-543-8888
atan@salford-systems.com
www.salford-systems.com

Salford Systems, winner of multiple international awards, is the developer of statistical and data mining software: CART, TreeNet, RandomForest—decision tree programs—and MARS—non-linear regression software. We strive to enable environmental researchers to easily analyze data ranging from ecosystems to species classification and prediction to landscape ecology.



A special thanks to the U.S. Forest Service, Rocky Mountain Research Station Missoula Fire Sciences Laboratory and to the Institute for Applied Ecosystem Studies US Forest Service, Northern Research Station for their contribution to this event.

Institute for Applied Ecosystem Studies

U.S. Forest Service
Northern Research Station
5985 Highway K
Rhineland, WI 54501



To learn more about us, visit
<http://www.nrs.fs.fed.us/units/iaes/>



Our **Mission** is to improve policy, management, and business decisions by being a world leader in developing principles for scaling site-level research to policy-relevant scales for the benefit of people, their economies, and the environment.

The Institute integrates established **Research Programs** in genetics, ecophysiology, and landscape ecology around three primary research problems:

- Scaling up the development program of our bioenergy crop, hybrid poplar, to the northeastern region of the United States and determining the implications of widespread intensive culture plantations for bioenergy and fiber.
- Scaling up the results of our Aspen FACE—Free Air Carbon (and ozone) Enrichment—experiment to landscape scales.
- Predicting the cumulative effects of natural disturbances and natural resource management in multi-owner landscapes.



RESTAURANTS NEAR MONONA TERRACE

Madison has a great set of restaurants within walking distance of Monona Terrace that should appeal to a wide variety of tastes and budgets. Below we have listed some of our favorites, but there are almost too many great restaurants in the area to list!

The restaurants are listed geographically according to their proximity and direction from Monona Terrace. A great searchable database for restaurants in Madison is: www.thedaily.com/eats. This is maintained by the Isthmus, Madison's weekly independent newspaper. The Onion (founded in Madison!), also has good restaurant reviews.

A complete listing of free wireless hotspots in Wisconsin can be found at: www.wififreespot.com/wi.html

Downtown and in the Immediate Vicinity of Monona Terrace

Other very nearby restaurants include 600-900 blocks of Willy Street (see below) and East end of State Street (also below)

ANCORA COFFEE

112 King St. (one block off Capitol Square)
(608) 255-0285
Cuisine: coffee, pastries, soup
Price Range: \$2-\$7
www.ancoracoffee.com

CAFÉ COSTA RICA

141 S. Butler Street (three blocks down the hill from Capitol Square)
(608) 356-9830
Cuisine: Wonderful Costa Rican food...seating is limited
Price Range: \$6-\$12

BROCACH IRISH PUB

7 W. Main St. (on Capitol Square)
(608) 255-2015
Cuisine: Irish
Price Range: \$10-15
Special Offerings: great live music!
www.brocach.com

CAFÉ CONTINENTAL

108 King Street, Madison (1.5 blocks from Monona Terrace)
(608) 251-4880
Cuisine: European and Italian
Price Range: \$13-\$35
Special Offerings: over 100 wines, 30 by the glass, reservations recommended
www.znbar.com

GREAT DANE PUB & BREWING COMPANY

123 E. Doty (one block east off Capitol Square)
(608) 284-0000
Cuisine: Brew Pub
Price Range: \$7-16
Special Offerings: One of Wisconsin's best-known brewpubs with local microbrews, billiards, and good pub food.
www.greatdanepub.com

HARVEST RESTAURANT

21 North Pinckney Street (on Capitol Square)
(608) 255-6075
Cuisine: French/American
Price Range: \$18-\$36
Special Offerings: A modern interpretation of French and American cuisines spotlighting local and organically grown ingredients. Notes: Menu changes seasonally
www.harvest-restaurant.com

L'ETOILE RESTAURANT AND CAFÉ SOLEIL (on Capitol Square)

25 North Pinckney Street
(608) 251-0500
Cuisine: seasonal menus are inspired by the artisans and small sustainable farms of the Midwest and are rendered with a French technique.
Price Range: average main course price - \$32
www.lettoile-restaurant.com

MERCURY LOUNGE

117 E. Mifflin St. (on Capitol Square)
(608) 255-8624
Cuisine: Greek food—gyros, souvlaki, chicken phyllo, dolma—as well as soups, salads, and deli sandwiches.
Price Range: \$2-\$12

OLD FASHIONED

23 N. Pinckney St. (on Capitol Square)
(608) 310-4545
Cuisine: Wisconsin Cuisine (cheese plates, brats, burgers, sandwiches, nightly entree specials)
Price Range \$7-\$15
www.theoldfashioned.com/index.php

RESTAURANT MAGNUS

120 East Wilson Street (one block east of Monona Terrace)
(608) 258-8787
Cuisine: Steak, Seafood, Tapas
Price Range: \$19-\$31
Special Offerings: Voted Best of Madison Restaurant in 2007
www.restaurantmagnus.com/general.html

OCEAN GRILL

117 Martin Luther King Jr. Blvd. (one block from Monona Terrace)
(608) 285-2582
Cuisine: Seafood and a fantastic wine list.
Price Range: \$6-\$30

PAISAN'S RESTAURANT

131 W Wilson (one block west of Monona Terrace)
(608) 257-3832
Cuisine: Italian
Price Range: Under \$10
Awards: Best of Madison - Pizza
Special Offerings: Outdoor and lakeview seating
www.paisansrestaurant.biz

TUTTO PASTA CUCINA

107 King St., Madison, 53703 (just off Capitol Square)
(608) 250-9000
Cuisine: Italian
Price Range: \$10-\$25
www.tuttopastacucina.com

East End of State Street (Closest to Capitol Square)

ANGELIC BREWING

322 W. Johnson St. (one block south of State Street)
(608) 257-2707
Cuisine: Everything from pasta to sandwiches, plus wide selection of local micro brews (Ale Asylum) on tap. Live music.
Price Range: \$6-\$18
www.angelicbrewing.com

CASA DE LARA

341 State Street #2
(608) 251-7200
Cuisine: Authentic Mexican food in a less-than-authentic setting!
Price Range: \$5-\$15
www.casadelara.net

CHUATARA

334 State St.
(608) 251-3626
Cuisine: Fresh Nepalese and Himalayan food, wonderful. Some Indian dishes. Try the goat!
Price Range: \$6-\$24

FRESCO

227 State St. (in the Overture Center)
(608) 663-7374
Cuisine: American contemporary cuisine focusing on regional ingredients. Very good.
Price Range: \$16-\$27

HIMAL CHULI

318 State St.
(608) 251-9225
Cuisine: Authentic Nepalese food. Vegetarian-friendly.
Price Range: \$6-\$13

THE ICON

206 State St.
(608) 256-3000
Cuisine: Tapas spot on upper State Street with 55 dish-Spanish menu.
Price Range: \$4-\$25

MICHELANGELO'S COFFEE SHOP

114 State St.
(608) 251-5299
Cuisine: Coffee, comfy chairs, great sandwiches.
Price Range: \$2-\$8

ORPHEUM THEATRE'S GRAND LOBBY

216 State St.
(608) 255-2594
Cuisine: Grand movie palace atmosphere, inventive cuisine.
Price Range: \$5-\$28
www.orpheumtheatre.net

West End of State Street (a little bit further walk, closer to the University of Wisconsin campus)

Note that from Monona Terrace to the 400 Block of State Street is a 0.8 mi walk.

BURAKA

543 State Street
(608) 255-3646
Cuisine: Great Ethiopian food!
Price Range: \$4-\$13

HUSNU'S

547 State St.
(608) 256-0900
Cuisine: Turkish dishes and Italian specialties with fresh fish and daily specials.
Price Range: \$5-\$13

KABUL

541 State St.
(608) 256-6322
Cuisine: Wonderful middle-Eastern (Afghani) food.
Price Range: \$5-\$12

KING OF FALAFEL

453 W. Gilman St. (one block south of State Street)
(608) 255-2622
Cuisine: Very fresh Middle Eastern food, with good salads, falafel and tabouleh.
Price Range: \$5-\$12
www.kingoffalafel.com

MAZA

558 State St (Across the street from Kabul!)
(608) 256-9330
Cuisine: Authentic Afghanistani specialties and a diverse menu of vegetarian entrees.
Price Range: \$8-\$14

NADIA'S

508 State St.
(608) 257-1740
Cuisine: Traditional French Provencal menu. Desserts made daily in-house.
Price Range: \$17-\$26
www.nadiasrestaurant.com

Rising Sons Deli

617 State Street
(608) 661-4334
Cuisine: Thai/Laotian—Phil thinks this is Madison's best Thai!
Price Range: \$6-\$12

SAMBA BRAZILIAN GRILL

240 W. Gilman St. (one block north of State Street)
(608) 257-1111
Cuisine: Brazilian barbecue (\$33). For vegetarians or lighter eaters, a 40-item salad bar by itself is \$15.
Price Range: \$15-\$33
www.sambabraziliangrill.com

Williamson (Willy) Street (down Capitol Hill to the East)

Note that from Monona Terrace to the 1200 Block of Willy Street is a 1.1 mi walk.

Bahn Thai

944 Williamson St.
608-256-0202
Cuisine: Wonderful Thai food.
Price Range: \$6-\$13
www.bahnthai.741.com

BABS' FRENCH QUARTER KITCHEN

1353 Williamson St. (a bit of a walk, but worth it. Bring cash.)
(608) 251-1222
Cuisine: Home cooking, New Orleans style...entrees to make your heart beat faster. Pecan pie, bread pudding, pralines.
Price Range: \$6-\$9

BANDUNG

600 Williamson St.
(608) 255-6910
Cuisine: Indonesian
Price Range: \$6-\$15
www.bandungrestaurant.com

ELDORADO GRILL

744 Williamson St.
(608) 280-9378
Cuisine: Western setting, upscale Mexican and Southwestern dishes, and the chef's even written his own cookbook. Very good.
Price Range: \$8-\$25
www.foodfightinc.com/eldorado.htm

Jamerica

1236 Williamson Street
(608) 251-6234
Cuisine: Jamaican—great jerk!
Price Range: \$6-\$15
www.jamericarestaurant.com

JOLLY BOB'S

1210 Williamson Street
(608) 251-3902
Cuisine: Jamaican with LOTS of colorful drinks. Like you are on a tropical vacation in Madison...
Price Range: \$10-\$16

LAO LAAN XANG

1146 Williamson St.
(608) 280-0104
Cuisine: Specializing in Laotian cuisine and vegetarian dishes. Phil's favorite.
Price Range: \$8.50-\$13

LAZY JANE'S CAFE

1358 Williamson St
(608) 257-5263
Cuisine: Wonderful breakfasts, funky atmosphere. Creamy chowder and chicken soup, the generous selection of salads, and out-of-this-world scones. Serving mimosas during breakfast.
Price Range: \$4-\$10

MEKONG

600 Williamson St. (adjacent to Bandung)
(608) 250-6280
Cuisine: Vietnamese and Thai cuisine, with standout options like kung namdeng and beef larb.
Price Range: \$5-\$16

ROMAN CANDLE

1054 Williamson Street
(608) 257-5263
Cuisine: Excellent pizza.
Price Range: \$6-\$16

SARDINE

617 Williamson St.
(608) 441-1600
Cuisine: Lakeside dining in the Machinery Row complex. Yes, they do serve fresh grilled sardines, as well as salmon, bass, skate and mussels, with pasta, beef and chicken rounding out a very nice menu.
www.sardinemadison.com
Price Range: \$6-\$20

WAH KEE CHINESE NOODLE AND RESTAURANT

600 Williamson St.
(608) 255-5580
Cuisine: Hong Kong and Cantonese-style noodles are the big draws. Good lunch specials and soups. Seafood specials.
Price Range: \$4-\$13

WEARY TRAVELER

1201 Williamson St.
(608) 442-6207
Cuisine: Favorite Willy Street gathering place, home of "Bob's Bad Breath Burger" (adorned with garlic and onions, of course, as well as cream cheese), sandwiches and other world-cuisine-influenced entrees.
Price Range: \$4-\$12

ENTERTAINMENT AND EVENTS

WISCONSIN FILM FESTIVAL

APRIL 3-APRIL 6

"The tenth annual Wisconsin Film Festival will present the best new independent film (feature, documentary, experimental), world cinema, and new media; cultivates discovery through talks, panels, performances, and coffeehouse discussions with filmmakers; and showcases the work of Wisconsin filmmakers through juried competitions."

www.wifilmfest.org

TUNES AT MONONA TERRACE

WEDNESDAY APRIL 9TH, 5:30-7 P.M.

Ladies Must Swing (Big Band)—Free music at the Terrace, courtesy of the Evjue Foundation, the charitable arm of The Capital Times. Concessions and cocktails are available for sale after 5pm.

www.mononaterrace.com/events/

WISCONSIN UNION THEATRE

On April 10th, the Anonymous Four, female vocal quartet, will perform spiritual and gospel hymns. They are joined by progressive fiddler Anger and bluegrass-newgrass guitarist Nygaard.

800 Langdon St.
(608) 262-2201

www.union.wisc.edu/uniontheater/index.html

OVERTURE CENTER FOR THE ARTS

Events during the conference include (among others): Children's Theater of Madison presenting Esperanza Rising (multiple dates) / Choir of King's College, Cambridge (April 10th)

201 State Street, Madison, WI 53703

Ticket Office: 608.258.4141

www.overturecenter.com

BARRYMORE THEATRE

Events during the conference include: Jim Hightower ("America's #1 Populist"), Sunday, April 6 at 7 pm.

2090 Atwood Ave, Madison, WI, 53704

Ticket Office: (608) 241-8633

www.barrymorelive.com

MADISON MUSEUM OF CONTEMPORARY ART

Exhibits during the time of the conference include (among others): Individual Experience: The Photographs of Ida Wyman / Jasper Johns: The Prints / Fun House: Sculpture from the Permanent Collection / Altered Geometry: Contemporary Sculpture from MMoCA's Collection

227 State Street
(608) 257-0158

www.mmoca.org

Other Live Music Venues

HIGH NOON SALOON

Showcasing many different styles of music

701 E. Washington Ave
(608) 268-1122

www.high-noon.com

CAFÉ MONTMARTRE

Typically Jazz music

127 East Mifflin Street

Phone: (608) 255-5900

www.themomo.com

Running Routes

CAPITOL/MONONA BAY LOOP (4.8 MILES)

Start in front of Monona Terrace and head east down the bike path (Lake Monona on your right). After about 3/4 mile, take a sharp left up East Wilson St. After a few blocks, take a right on King St. and soon after a right onto Pickney St. Loop around the capitol counter clockwise until you hit West Washington Ave. Go right down West Washington for about a mile, then turn left onto West Shore Dr. (if you hit park street, you've gone too far). Take West Shore Dr. around Monona Bay until it turns into Gilson St. Next take a left onto West Lakeside. Run on Lakeside and go over John Nolan Drive. Now you are back on the bikepath. Head east back to Monona Terrace. For a map of this run, or to view other runs in Madison, visit Movin' Shoes web site at

www.movinshoesmadison.com

Sources of Information

THE ISTHMUS

Pick up the weekly, free Isthmus paper (available in the entryways of most coffee shops, restaurants etc.) for a complete listing of events, live music, movie times etc. or visit them online at: www.thedailyage.com

VISITMADISON.COM

This website offers a plethora of information about lodging, dining, entertainment, transportation, maps and much more.

Free Wireless Internet Services

A complete listing of free wireless hotspots in Wisconsin can be found at:

www.wififreespot.com/wi.html

Ancora Coffee Roasters 112 King St. 255-0285	Barriques Coffee Trader 127 W. Washington Ave. 268-6264
Café Montmartre 127 E. Mifflin St. 255-5900	Genna's Cocktail Lounge 105 W. Main St. 255-4770
Madison Public Library 201 W. Mifflin St. 266-6300	Michelangelo's Coffee House 114 State St. 251-5299

Notes

Notes

Notes