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**US-IALE 2007 Annual Symposium**

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**Insert Hotel Map Here**

## **WELCOME!**

### **US-IALE 2007 Annual Symposium**

We would like to welcome you to the 2007 Annual Conference of the US chapter of the International Association of Landscape Ecologists (USIALE). This is the 22<sup>nd</sup> meeting of USIALE and the second time it has taken place in beautiful Tucson, Arizona. We believe that this year's annual meeting will be an exceptional experience. An exciting slate of presentations has been organized with workshops on teaching, modeling and analyzing landscapes; four concurrent sessions covering topics ranging from remote sensing to seascapes to fire regimes will be presented; a poster session with stimulating science, conversation and refreshments has been organized; and plenary lectures by James Agee and Jesse Logan are not to be missed. None of this happens by magic. Don McKenzie has guided the development of this year's program; John DiBari has organized an interesting set of field trips for conference attendees to explore the local landscapes; and we continue to rely on Cindy Delaney and staff for their excellent logistical support. The conference is taking place in a wonderful venue in the center of this vast desert sea valley. The Doubletree Hotel Tucson has given us great support throughout the planning process. On behalf of the conference organizing committee, we hope you will have an exceptional conference experience (as we so often do at USIALE meetings) and we look forward to seeing you there, hearing your presentations and viewing your posters.

Have a great conference

Bob Keane  
2007 Conference Chair

Bob Gardner  
US-IALE President

## CONFERENCE SCHEDULE AT-A-GLANCE US-IALE 2007 Annual Symposium

### MONDAY, APRIL 9

7:30 AM-6:00 PM	Registration Open – <i>Ballroom Foyer</i>
7:45 AM	Buses depart from Front Lobby for Workshops
8:00-11:30 AM	Eco-hydrologic Modeling with the RHESSys Modeling Framework – <i>University of Arizona</i>  Constructing and Teaching a Great Landscape Course <i>Doubletree Hotel - Cottonwood Room</i>
8:00 AM-4:30 PM	Fragstats - <i>University of Arizona</i>
12:00 – 5:00 PM	Executive Board Meeting - <i>Boardroom</i>
1:00-4:30 PM	Job Hunting Experiences of Recent Graduates <i>Doubletree Hotel - Cottonwood Room</i>  IDRISI – Land Change Modeler <i>University of Arizona–bus departs from Front Lobby at 12:45pm</i>
6:00 – 8:00 PM	Welcome Reception – <i>Courtyard</i>

### TUESDAY, APRIL 10

7:30 – 5:00 PM	Conference Registration – <i>Ballroom Foyer</i>
7:30 – 8:15 AM	Continental Breakfast - <i>Ballroom Foyer</i>
8:15 - 9:30 AM	Plenary Session –Dr. Jesse Logan, <b>Ghost Forests, Grizzly Bears, and the Mountain Pine Beetle: the Spiraling Consequences of Climate Change</b> <i>Ballroom D &amp; E</i>
9:30 - 10:30 AM	Refreshment Break – <i>Ballroom Foyer</i>
10:00 AM – 5:00 PM	Poster Set-up - <i>Ballroom Foyer &amp; Ballroom A,B &amp; C</i>
10:00 AM – 12:00 PM	Technical Sessions & Symposia- <i>see next section for detail</i>
12:00 - 1:00 PM	US-IALE Mentor Lunch – <i>Courtyard</i>
1:00 – 3:00 PM	Technical Sessions & Symposia- <i>see next section for detail</i>
3:00-3:20 PM	Refreshment Break - <i>Ballroom Foyer</i>
3:20-5:20 PM	Technical Sessions & Symposia - <i>see next section for detail</i>
5:30 – 7:00 PM	Poster Social – <i>Ballroom Foyer &amp; Ballroom A, B &amp; C</i>
6:30-8:00 PM	Student Social – <i>Reid Park</i>

**WEDNESDAY, APRIL 11**

- 7:00 – 8:00 AM Field Trip Departures from *Front Lobby*
- 7:00 - 9:00 PM NASA-MSU Awards Banquet (Invitation Only)– *Bonsai/Boojum Room*

**THURSDAY, APRIL 12**

- 7:00 – 8:00 AM Editorial Board Breakfast – *Palo Verde*
- 7:30 – 8:15 AM Continental Breakfast – *Ballroom Foyer*
- 7:30 - 4:00 PM Conference Registration – *Ballroom Foyer*
- 8:15 - 9:40 AM Plenary Session: Dr. James Agee- *Ballroom D & E*  
**Wildland Fire as a Forest Landscape Process-Problems of Scale**
- 9:40 - 10:00 AM Coffee Break – *Ballroom Foyer*
- 10:00 AM – 12:00 PM Technical Sessions & Symposia- *see next section for detail*
- 12:00 - 1:00 PM Lunch and US-IALE Business Meeting - *Courtyard*
- 1:00 – 3:00 PM Technical Sessions & Symposia- *see next section for detail*
- 3:00 – 3:20 PM Coffee Break - *Ballroom Foyer*
- 3:20 - 5:20 PM Technical Sessions & Symposia- *see next section for detail*
- 6:00 - 7:00 PM Reception - *Ballroom Foyer*
- 7:00 - 9:30 PM US-IALE Awards Banquet – *Ballroom D & E*

**FRIDAY, APRIL 13**

- 7:00 - 8:30 AM US-IALE Executive Board Meeting – *Palo Verde*
- 7:30 – 8:30 AM Continental Breakfast – *Ballroom Foyer*
- 8:00 – 10:00 AM Technical Sessions & Symposia- *see next section for detail*
- 10:00 – 10:20 AM Coffee Break – *Ballroom Foyer*
- 10:20 AM – 12:20 PM Plenary Symposium - ***Toward a Collective Disciplinary Agenda for Landscape Ecology: Goals and Strategies*** - featuring Bruce Milne, Richard T. Forman, John Wiens and Robert Gardner

## CONFERENCE MEALS AND EVENTS US-IALE 2007 Annual Symposium

### **Monday, April 9<sup>th</sup>:**

Workshops will include beverage refreshments.

There will be a Welcome Reception in the Courtyard from 6:30-7:30 p.m., although the bar will be open from 6:00-8:00 p.m. Light snacks will be served. You will be on your own for dinner.

### **Tuesday, April 10<sup>th</sup>:**

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. Dinner is on own unless you are attending the student social.

### **Wednesday, April 11<sup>th</sup>:**

You are on your own for meals unless you are going on a field trip, where lunch and beverages will be provided. The NASA-MSI Banquet is invitation only.

### **Thursday, April 12<sup>th</sup>:**

Continental breakfast and lunch will be provided; the morning refreshment break will only include beverages; 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.)

### **Friday, April 13<sup>th</sup>:**

Continental breakfast and morning beverages will be provided.

## TECHNICAL PRESENTATIONS US-IALE 2007 Annual Symposium

**TUESDAY, APRIL 10  
10:00 AM – 12:00 PM**

**Salon D**                      **NASA-MSU Golley-Odum Symposium: Integrating Remote Sensing of Forest Disturbances with Models at Broad Scales**  
**Session Chair:** *Robert Scheller*

- 10:00 AM      Simulation of fire management and forest successional dynamics in the New Jersey pine barrens: Sensitivity to remotely sensed initial landscape configuration - *Robert Scheller*
- 10:20 AM      Integrating Landscape Change and Ecosystem Modeling of the Wildland/Urban Interface of The New Jersey Pinelands - *Richard Lathrop*
- 10:40 AM      Simulating Landscape Influences on Occurrence and Spread of Forest Wildfires in a Modern Surface Fire Regime - *Jian Yang*
- 11:00 AM      Geostatistical analysis of satellite mapped defoliation intensity: Integrating results and Modeling defoliation effects on above-ground biomass - *Jane Foster*
- 11:20 AM      Modeling the Consequences of Forest Disturbance in Multiple Ecosystems using MODIS - *Kirsten de Beurs*
- 11:40 AM      **OPEN**

**Salon E**                      **Putting theory into practice: application of landscape ecology principles into environmental decision-making**  
**Session Chair:** *Anita Morzillo, Matt Nicholson, Christine Mazzarella, K Bruce Jones*

- 10:00 AM      Putting Theory into Practice -- Concluding remarks - *Matthew Nicholson*
- 10:20 AM      Wildlife management and landscape ecology: integrating concepts and practice - *Terry Bowyer*
- 10:40 AM      Maryland's Green Infrastructure Program: Using landscape pattern and process as a guide to government planning. - *Bill Jenkins*
- 11:00 AM      A Landscape Ecological Perspective as the Basis for Land Use Planning in the New York – New Jersey Highlands - *Richard Lathrop*
- 11:20 AM      Incorporating landscape ecology into the selection and design of conservation reserves in the Northeast - *Mark Andersen*
- 11:40 AM      Discussion

**Salons F, G & H      Species Distributions: Methods**  
**Session Chair:** *Sarah Goslee*

- 10:00 AM      The Impact of Landscape Fragmentation on Birds and Mammals in the Medicine Bow Mountains, Wyoming USA - *Sam Cushman*
- 10:20 AM      Predictive vegetation models: A comparison of model combination approaches - *Ben Gilmer*
- 10:40 AM      Modeling forest composition in contrasting landscapes in the Central Hardwood Region with the integrated moisture index (IMI) - *David Welch*
- 11:00 AM      Implications of the Abundance-Occupancy Rule: Can Atlas Data be used to Monitor Avian Population Change? - *Benjamin Zuckerberg*
- 11:20 AM      Projected climate-induced changes in the fauna of U.S. national parks - *Joshua Lawler*
- 11:40 AM      Patch size affects plant extinction rates during succession in an experimentally fragmented Grassland - *Cathy Collins*

**Bonsai                      Remote Sensing I**  
**Session Chair:** *Andy Hudak*

- 10:00 AM      **OPEN**
- 10:20 AM      An Ecological Framework for Fuzzy Set Accuracy Assessment of Remote Sensing-Based Land-Cover Maps - *John Lowry*
- 10:40 AM      Subsampling Approach to Aggregating LiDAR-Derived Forest Structure Predictions to the Forest Stand Level - *Jeffrey Evans*
- 11:00 AM      A general method for analysis of multiple resolution landscape imagery - *Robert Gardner*
- 11:20 AM      Mapping yearly forest disturbance and recovery processes in western Oregon, U.S.A. - *Robert Kennedy*
- 11:40 AM      Vegetation Phenology and Climate Variability in a Sky Island in Arizona - *Jennifer Davison*

**Boojum                      Theory & Quantitative Methods**  
**Session Chair:** *Rick Koehler*

- 10:00 AM      Neural network based commitment and typicality measures in landscape uncertainty analysis - *Zhe Li*
- 10:20 AM      Graph analysis of connectivity across gradients in habitat proportion in the Mid-Atlantic region of the United States - *Joseph Ferrari*



- 10:40 AM On the importance of dimensionality of space in models of space-mediated population Persistence - *Bai-Lian Li*
- 11:00 AM The soundscape: a new informative framework to investigate the complexity of landscapes - *Almo Farina*
- 11:20 AM Using Landscape Metrics to Examine and Quantify Streamflow Disturbances – *Richard Koehler*
- 11:40 AM **OPEN**

## 1:00 PM – 3:00PM

### **Salon D** **NASA-MSU Golley-Odum Symposium: Defining and Modeling Species-Habitat Associations: Challenges Across Landscapes (and seascapes)** **Session Chair:** *Yolanda Wiersma, C. Ashton Drew, Falk Huettmann*

- 1:00 PM Keynote: Niche theory and habitat suitability modeling - *Alexandre Hirzel*
- 1:20 PM The State of Spatio-Temporal Statistical Modeling in Ecology - *Mevin Hooten*
- 1:40 PM A global meta-analysis of spatially explicit projects modeling biodiversity components: algorithms, deviations, data, reality checks and lessons learnt. - *Falk Huettmann*
- 2:00 PM The role of assumptions in predictions of habitat availability and quality - *Edward Laurent*
- 2:20 PM Incorporating ecological theory into models of habitat quality: the importance of variation in space and time - *Robert Fletcher*
- 2:40 PM Focused Assessment of Scale-Dependent Vegetation Pattern - *Todd Lookingbill*

### **Salon E** **Recent advances and future innovations in multiscale systematic tree-ring reconstruction of historical fire regimes** **Session Chair:** *Emily Heyerdahl, Don Falk*

- 1:00 PM Recent advances and future innovations in multiscale tree-ring reconstruction of historical fire regimes - *Emily Heyerdahl*
- 1:20 PM How accurate are fire-scar sampling methods at multiple scales? - *Megan van Horne*
- 1:40 PM Analyzing spatial and temporal patterns of fire frequency from fire-scar data: lessons learned from a comprehensive field validation in southern Arizona - *Calvin Farris*
- 2:00 PM Spatial patterns and controls on fire regimes in mixed conifer forests in California – *Alan Taylor*
- 2:20 PM Multi-scale modeling with spatially explicit fire-scar records in the Pacific Northwest, USA. – *Don McKenzie*
- 2:40 PM Multi-proxy, multi-century, and multi-scale fire and forest histories from tree-ring data – *Peter M Brown*

**Salons F, G & H      Landscape Change: Modeling & Analysis**

**Session Chair:** *Bob Keane*

- 1:00 PM      Historic Channel Dynamics and Implications for Future Vegetation Change along the San Pedro River, Arizona, USA - *Mark Dixon*
- 1:20 PM      Quantitative ecoregions of the conterminous United States - *Paul Hessburg*
- 1:40 PM      Forest biomass estimation and change using kNN in the Highlands of New Jersey - *Inga La Puma*
- 2:00 PM      The Upper Santa Cruz River: A Case Study for Shifting Riparian Conditions - *Amy McCoy*
- 2:20 PM      Assessing Forest Cover Change on Mt. Kenya Using Multitemporal Landsat Data – *John Maingi*
- 2:40 PM      Three decades of land change in a flash flood-prone Haitian watershed – *Anna Versluis*

**Bonsai**

**Remote Sensing II**

**Session Chair:** *Melissa Cameron*

- 1:00 PM      Detecting the invasive shrub, *Lonicera maackii*, using Landsat data in SW Ohio - *Mary Henry*
- 1:20 PM      Assessing the spatiotemporal pattern of primary production in urban environment using remote sensing data: A case study in Phoenix, USA - *Alexander Duyantuyev*
- 1:40 PM      Identifying Disturbance Gradients And Their Implications For Biodiversity Conservation In Tropical Rainforests Of Northeast India - *Sonali Ghosh*
- 2:00 PM      Soil moisture as the determinant of spatial heterogeneity in savanna landscapes: A view across space and time. - *Tony Rajan Mathew*
- 2:20 PM      Image texture and productivity as predictors of bird species richness in the Chihuahuan Desert - *Veronique St-Louis*
- 2:40 PM      **OPEN**

**Boojum**

**Species in Urban Landscapes**

**Session Chair:** *Li An*

- 1:00 PM      Predicting high risk areas of gophersnake (*Pituophis catenifer*) mortality on the Upper Snake River Plain, Idaho, USA. - *Denim Jochimsen*
- 1:20 PM      Assessing Potential Habitat Characteristics of Urban-Adapted Lizards in Tucson, Arizona – *Heidi Flugstad*
- 1:40 PM      Influences of habitat availability and landscape context on anuran community structure along an urban-rural gradient - *Finn Pillsbury*
- 2:00 PM      Analysis of landscape characteristics of deer vehicle collisions in Missouri - *Jacqueline Schneiderman*
- 2:20 PM      Direct and indirect effects of roads on forest birds - *Emily Minor*
- 2:40 PM      **OPEN**

## 3:20 PM – 5:20PM

### Salon D

#### **NASA-MSU Golley-Odum Symposium: Defining and Modeling Species-Habitat Associations: challenges Across Landscapes (and seascapes)** **Session Chair:** *Yolanda Wiersma, C. Ashton Drew, Falk Huettmann*

- 3:20 PM A comparison of statistical models for predicting moose habitat in the Liard Valley, Yukon – *Yolanda Wiersma*
- 3:40 PM Understanding year-to-year inconsistency in bird-landscape relations: the influence of life-history traits and model selection uncertainty - *Sam Riffell*
- 4:00 PM Boreal toad (*Bufo boreas boreas*) population connectivity in Yellowstone National Park: quantifying matrix resistance and model uncertainty using landscape genetics – *Melanie Murphy*
- 4:20 PM Integrating GAP wildlife habitat models with IFMAP, Michigan's forest management decision-support environment - *Jay Roberts*
- 4:40 PM Habitat classification and conservation practice: scale-matching between ecological and statistical models - *Nicollete Cagle*
- 5:00 PM When does fine-scale expert opinion improve large-scale regional species distribution models? - *C. Ashton Drew*

### Salon E

#### **Fire & Landscape Pattern** **Session Chair:** *Peter Brown*

- 3:20 PM Spatial and Temporal Patterns of Historic Fire Regimes in Mixed Conifer Forests in the central Sierra Nevadas - *Andrew Scholl*
- 3:40 PM Investigating local scale variability in post-wildfire vegetation dynamics for a burned area in Central Arizona - *Grant Casady*
- 4:00 PM **OPEN**
- 4:20 PM Characterizing the historical range and variability of late-successional forest and fire severity in a large landscape in the interior Pacific Northwest using a landscape fire succession model – *Rebecca Kennedy*
- 4:40 PM Simulation of some consequences of variability in fire interval distributions for landscape composition and structure - *Carol Miller*
- 5:00 PM Disturbance as Feedback: Disturbances at multiple scales in riparian systems on the Colorado Plateau - *Cynthia Dott*

**Salons F, G & H      Species Distributions: Invasives**  
**Session Chair:** *Ross Meentemeyer*

- 3:20 PM      Patch dynamics of managed invasive aquatic weeds in the Sacramento-San Joaquin Delta, California - *Maria Santos*
- 3:40 PM      Explaining and predicting the distribution of *Celastrus orbiculatus* in the Southern Appalachians using hierarchical Bayesian modeling - *Thomas Albright*
- 4:00 PM      The effects of wetlands on zebra mussel (*Dreissena polymorpha*) dispersal in coupled lake-stream systems - *Betsy Bodamer*
- 4:20 PM      Incorporating Human Interaction Variables in a Non-parametric Decision Support System to Predict Gypsy Moth Outbreak - *Christopher Lippitt*
- 4:40 PM      Abnormal precipitation patterns provide opportunities to map a non-native perennial grass *Eragrostis lehmanniana* in desert grasslands - *Cho-ying Huang*
- 5:00 PM      Modeling the long-distance dispersal of the emerald ash borer - *Jonathan Bossenbroek*

**Bonsai                      Simulation Models: Plants, Animals, Ecosystems**  
**Session Chair:** *Eric Gustafson*

- 3:20 PM      Terrestrial carbon flux responses to precipitation in a Sonoran desert vegetation mosaic – *Darrel Jenerette*
- 3:40 PM      Reconnecting fragmented landscapes for grizzly bears in Alberta, Canada - *Barbara L Schwab*
- 4:00 PM      Saltcedar Dominance of Lower Colorado River Floodplains: Conceptual Model and Management Implications - *Matthew Grabau*
- 4:20 PM      Effects of parcelization and land divestiture on forest sustainability in simulated forest Landscapes - *Eric Gustafson*
- 4:40 PM      **OPEN**
- 5:00 PM      **OPEN**

## TECHNICAL PRESENTATIONS US-IALE 2007 Annual Symposium

**THURSDAY, APRIL 12**  
**10:00 AM – 12:00 PM**

**Salon D**                      **NASA-MSU Golley-Odum Symposium: Drivers and implications of land use and landcover change**  
**Session Chair:** *Sam Riffell, Jack Liu*

- 10:00 AM      Cross-boundary Coordination Among Private Forest Owners as a Mechanism to Moderate Landscape and Land Use Change – *Lisa Schulte*
- 10:20 AM      Houses as a driver of landscape change – *Christopher Lepczyk*
- 10:40 AM      Picture Michigan Tomorrow: Socioeconomic Trends and Their Impacts on Land Use and Land Cover Change – *Charles McKeown*
- 11:00 AM      Impacts of demographic compositions on long-term population and landscape dynamics – *Li An*
- 11:20 AM      Effects of road development and logging on the southern range limit of wolverines in boreal forest – *Jeff Bowman*
- 11:40 AM      Discussion

**Salon E**                      **Patches, Corridors, and Connectivity**  
**Session Chair:** *Bill Hargrove, Forrest Hoffman*

- 10:00 AM      Population Viability Analysis Based on Studies of Individual Behavior – *James Westervelt*
- 10:20 AM      Marketing to wildlife: conjoint measurement in conservation design – *Abel Wolman*
- 10:40 AM      Hydrological Sinks in Wetland Systems: Is Amphibian Habitat Going Down the Drain? – *William Fields*
- 11:00AM      Predicting connectivity using circuit analysis: theory, algorithms, and applications in population genetics and conservation planning – *Brad McRae*
- 11:20 AM      Habitat Fragmentation, Extinction Thresholds and Pollinator Services in Agroecosystems – *Tim Keitt*
- 11:40 AM      Corridor optimization in fragmented landscapes, or the shortest distance between two points is a crooked line. – *John DiBari*

**Salons F, G & H**            **Species Distributions: Populations**  
**Session Chair:** *Mike Wimberly*

- 10:00 AM      Spatial Distribution of Mountain Pine Beetle in Morice Timber Supply Area in Western British Columbia between 1995 and 2002 – *Magda Biesiada*

- 10:20 AM The influence of landscape variables on spatial genetic structure of tailed frogs (*Ascaphus truei*) across old-growth and harvested forests on the Olympic Peninsula, Washington, USA -*Stephen Spear*
- 10:40 AM The influence of landscape resource heterogeneity on ungulate distribution – *Abbie Dennis-Stewart*
- 11:00 AM Redband trout (*Oncorhynchus mykiss gairdneri*) distribution and longitudinal temperature profiles: Implications across a basin - *Luis Francisco Madrian*
- 11:20 AM Using landscape variables to predict red-headed woodpecker occurrences in Wisconsin – *Christine Ribic*
- 11:40 AM A Spatially Explicit Simulation of Wildlife Response to Human Recreation – *Patrick Zollner*

**Bonsai**                      **Simulation Models: Disturbance**  
**Session Chair:** *Rebecca Kennedy*

- 10:00 AM Understanding forest landscape disturbance regimes by simulation modeling: How important are user assumptions? – *Ajith Perera*
- 10:20 AM Simulation of Post-fire Vegetation Recovery Using LANDIS Modeling - *Y.Q. Wang*
- 10:40 AM Simulating Landscape Level Disturbances: Representing All The Pieces – *Christine Stalling*
- 11:00 AM Modeling the effects of historical and current fire regimes on nutrient cycling in the Lake Tahoe Basin – *Sarah Ganschow*
- 11:20 AM Landscape simulation modeling of anthropogenic impacts on pinyon-juniper woodland distribution during early settlement: Nevada Great Basin – *Dongwook Ko*
- 11:40 AM Climate change effects on historical range and variability of species composition on two large landscapes in central Utah, USA – *Bob Keane*

**Boojum**                      **Spatial Analysis Theory & Methods**  
**Session Chair:** *Lara Kellogg*

- 10:00 AM Mapping Pre-European Settlement Vegetation at Fine Resolutions Using a Hierarchical Bayesian Model and GIS – *Hong He*
- 10:20 AM Fuel variability within the landscape-scale of Rocky Mountain Region: Integration of field data, geospatial information, and spatial statistics - *Mohammed Kalkhan*
- 10:40 AM Spatial Gradients Reveal Universality Classes in the Relation Between Drainage Networks and Climate – *Matthew Luck*
- 11:00 AM Using population viability models for measuring landscape connectivity – *Madhura Niphadkar*
- 11:20 AM Predicting bird declines in Amazon forest fragments - *Susan Laurance*
- 11:40 AM **OPEN**

## 1:00 PM – 3:00 PM

### **Salon D**                      **Burn Severity Mapping: Research & Applications**

**Session Chair:** *Eva Karau*

- 1:00 PM      Monitoring Trends in Burn Severity: A Nationwide Baseline of Historical Burn Severity Data –  
*Jeff Eidenshink*
- 1:20 PM      Using the Normalized Burn Ratio to estimate burn severity in boreal Alaska: lessons learned.  
-*David Verbyla*
- 1:40 PM      Burn Severity Mapping and Current Fire Regimes – *Andrea Thode*
- 2:00 PM      Fire effects on vegetation recovery in the Santa Catalina Mountains – *Sarah Mattson*
- 2:20 PM      Patch Size Distributions of Post Fire Landscapes in the Crown of the Continent Ecosystem,  
Montana, USA – *Josh Rodriguez*
- 2:40 PM      A Rigorous Assessment of Fine-Scale Spatial Variation in Immediate Post-Fire Effects –  
*Andrew Hudak*

### **Salon E**                      **Patches, Corridors, and Connectivity**

**Session Chair:** *Bill Hargrove, Forrest Hoffman*

- 1:00 PM      Assessing structural and functional connectivity with mathematical morphology – *Peter Vogt*
- 1:20 PM      Corridors increase species richness at large scales – *Ellen Damschen*
- 1:40 PM      Connectivity, patch shape, and apparent competition among plants – *John Orrock*
- 2:00 PM      Cluster Identification Using a Parallel Hoshen-Kopelman Adaptation With Finite State  
Machines – *Matthew Aldridge*
- 2:20 PM      Comparing measures of connectivity on landscape networks using the FunConn tools  
-*David Theobald*
- 2:40 PM      Measuring landscape connectivity by incorporating variable barrier strengths of  
transportation infrastructure into the effective mesh size - *Jochen A.G. Jaeger*

### **Salons F, G & H**            **Species Distributions: Communities**

**Session Chair:** *Wiemin Xi*

- 1:00 PM      Estimating bird density as a function of environmental covariates in Panamanian dry forest  
fragments – *Jesse Lasky*
- 1:20 PM      Grassland birds are not viable in the largest tallgrass landscape left in North America –  
*KimberlyWith*
- 1:40 PM      Longitudinal connectivity of stream reaches and riparian plant species diversity – *Juliet  
Stromberg*
- 2:00 PM      Rodent Community Landscape Ecology in Grassland-Shrubland Ecotones and Gradients in  
the Chihuahuan Desert – *Andrea Campanella*
- 2:20 PM      The effects of land development across a forest composition gradient on Cape Cod,  
Massachusetts – *Stephen McCauley*
- 2:40 PM      Historical and contemporary land-use in a grassland landscape – *Erin Questad*

**Boojum**                      **Conservation Planning: Analysis**  
**Session Chair:** *Eric White*

- 1:00 PM      Rapid Evaluation of Arid Lands (REAL) – *Michael DeMers*
- 1:20 PM      Ecological Conectivity Networks For Biodiversity Conservation In A Pastoral Landscape In Centralamerica – *Diana Useche (2007 FOREIGN SCHOLAR AWARD WINNER)*
- 1:40 PM      Bandaging the fragmented habitats: Elephant corridors of India – *Sandeep Tiwari*
- 2:00 PM      Testing the sensitivity of a rank-based threat assessment index applied to the upper Tennessee River basin, USA – *Kimberly Mattson*
- 2:20 PM      **OPEN**
- 2:40 PM      **OPEN**

**3:20 PM – 5:20 PM**

**Salon D**                      **Disturbance Effects**  
**Session Chair:** *Carol Miller*

- 3:20 PM      **OPEN**
- 3:40 PM      The effects of prescribed fire on avian foragers in the ponderosa pine forests of the Southwestern US – *Lindsay Berk*
- 4:00 PM      Prediction of plant community structure and forest regeneration after severe fire: a comparison of methodologies – *Sandra Haire*
- 4:20 PM      Simulating the effects of different harvest patch sizes on patterns of spruce budworm defoliation in a boreal mixed-wood forest. – *Patrick James*
- 4:40 PM      Flooding causes on Tabasco Mexico and their implications – *Lilly Gama*
- 5:00 PM      Using False-Rings in Riparian Trees to Reconstruct No-flow Disturbance Regimes – *Kiyomi Morino*

**Salon E**                      **Patches, Corridors, and Connectivity**  
**Session Chair:** *Bill Hargrove, Forrest Hoffman*

- 3:20 PM      Roads as barriers and conduits for connectivity: using multiple taxonomic groups to assess road effects across multiple spatial scales – *Daniel Smith*
- 3:40 PM      Using movement behaviors to predict connectivity for rare animals – *Daniel Kuefler*



- 4:00 PM Assessing Landscape and Focal Species Connectivity in Florida – *Thomas Hctor*
- 4:20 PM Predicting Potential Dispersal Pathways from Yellowstone to the Yukon and Within the Southeastern Ecological Framework Using the PATH Model – *William Hargrove*
- 4:40 PM Using the PATH Model to Predict Corridors for Red-Cockaded Woodpecker and Gopher Tortoise Near Military Installations – *Forrest Hoffman*
- 5:00 PM Discussion

**Salons F, G & H      Spatial Analysis: Applications**  
**Session Chair: Patrick Zollner**

- 3:20 PM Functional landscape connectivity of old-growth reserves in the Tongass National Forest, Alaska – *Sanjay Pyare*
- 3:40 PM Does the spatial pattern of humpback whales in the North Atlantic Ocean provide insight into their population structure? – *Kathleen Vigness Raposa*
- 4:00 PM Impacts of Woodland Expansion on the Emerging Forest Disease Sudden Oak Death – *Ross Meentemeyer*
- 4:20 PM Spatial distribution of land cover and their influences on watershed condition – *Peter Schweizer*
- 4:40 PM Spatial Patterns of Bamboo Foraging and Recovery in a Reintroduction Enclosure for a Giant Panda – *Vanessa Hull*
- 5:00 PM **OPEN**

**Boojum                      Cultural Landscapes I**  
**Session Chair: Christine Stalling**

- 3:20 PM Green Areas as an element in a disturbed urban landscape; their effects on socio-economic and ecology; an example of megacity Karachi/Pakistan – *Muhammad Anwar*
- 3:40 PM Soundscape Ecology: Bioacoustic analysis across anthropogenic disturbance gradients – *Brian Napoletano*
- 4:00 PM Reclaiming Forgotten Corridors: An Urban Greenway System Utilizing Secondary Watercourses in Tucson, Arizona – *Wendy Lotze*
- 4:20 PM Transect Coding in Western Canada: Transitioning from Use-Based to Gradient-Based Regulation in the Planning and Design of Sustainable Urban Environments - *Gian-Carlo Carra*
- 4:40 PM **OPEN**
- 5:00 PM **OPEN**

## FRIDAY, APRIL 13

### 8:00 AM – 10:00 AM

#### **Salon D**                      **Phenologies as Integrative Phenomena for Landscape Research**

**Session Chair:** *Geoff Henebry*

- 8:00 AM      An Emerging National Phenology Network for the U.S.A. – *Julio Betancourt*
- 8:20 AM      Using Light Interception and in-Situ Surface Reflectance in Support of Moderate Resolution Remotely Sensed Phenology – *Mark Fridayedl*
- 8:40 AM      Environmental controls on remotely sensed Monsoon Asia tropical forest landscape phenology – *Alfredo Huete*
- 9:00 AM      Characterizing the Phenology of Desert Annuals – *Bradley Reed*
- 9:20 AM      Remotely sensed monitoring of vegetation phenology before and after disturbance events in Arizona – *Wim van Leeuwen*
- 9:40 AM      Monitoring the phenologies of vegetation moisture using cooler earthlight – *Geoff Henebry*

#### **Salon E**                      **Managed Landscapes**

**Session Chair:** *Falk Huettmann*

- 8:00 AM      The importance of landscape and site factors in grazinglands of the northeastern United States – *Sarah Goslee*
- 8:20 AM      Landscape heterogeneity and the influence of prescribed fire and thinning on forest regeneration in southern Ohio – *Louis Iverson*
- 8:40 AM      Landscape approach for forest management in India: a panacea or passion – *Pradeep Mathur*
- 9:00 AM      An integrative look at wild rice distribution and harvest across state, tribal and treaty ceded lands in Minnesota and Wisconsin – *Annette Drewes*
- 9:20 AM      Harvesting: a keystone process in cover type evolution at landscape level? Fourteen landscape histories in Quebec (Canada) – *Eric Alvarez*
- 9:40 AM      Investigating the relationship between the amount and degree of tree cover connectivity and the abundance of selected forest birds in the urban regions across the eastern United States – *Sadahisa Kato*

#### **Salons F, G & H**            **Cultural Landscapes II**

**Session Chair:** *Nils Peterson*

- 8:00 AM      National Forests on the Edge: Examining Residential Development in Forested Landscapes. – *Eric White*

- 8:20 AM The Wildland-Urban Intermix dynamics in the nine states of southeastern U.S. from 1990 to 2000 – *Yangjian Zhang*
- 8:40 AM Forest landscapes and human disturbances: dealing with cultural patterns and ecological consequences – *Raffaele Laforteza*
- 9:00 AM Using landowner decisions to predict landscape change and alternative futures – *Amy Pocewicz*
- 9:20 AM Measuring direct impacts of attitudes on the environment using household location choices – *Markus Peterson*
- 9:40 AM **OPEN**

**Boojum Conservation Planning: Restoration**  
**Session Chair: *Wei Liu***

- 8:00 AM Short-term impacts of large-scale vegetation restoration on shrubsteppe bird species – *Russell Norvell*
- 8:20 AM Assessing the Potential for Rehabilitated Aggregate Extraction Sites to be used as Reintroduction Sites for Species at Risk in Ontario: A Metapopulation Approach. – *Melissa Cameron*
- 8:40 AM Using landscape context to guide the rehabilitation of pits and quarries in Ontario – *Robert Corry*
- 9:00 AM A Microclimate Design Framework to Inform the Rehabilitation of Aggregate Extraction Sites – *Natasha Kenny*
- 9:20 AM Ecological Impacts of the Grain-to-Green Program in Wolong Nature Reserve for Giant Pandas (China) – *Wei Liu*
- 9:40 AM **OPEN**

**POSTER SESSIONS**

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1. Proximate and underlying causes of deforestation in the Southeast Mexican Tropical Dry Forest – *Rogelio Corona*
2. What effect do prickly pears (*Opuntia spp.*) have on the microtopography of the northern Chihuahuan desert? - *Nori Koehler*
3. Habitat fragmentation and roads in the Monarch Butterfly Biosphere Reserve in Mexico, 2000-2006 – *M. Isabel Ramirez*
4. Deforestation, land use changes and fragmentation patterns in the tropical dry forest of South Oaxaca, Mexico. - *Edgar Villeda*
5. Impact of tourism and urbanization in the landscape ecology of Abbottabad - *Farah Rafiq*

6. Historic Channel, Vegetation, and Floodplain Land Cover Change on the Missouri National Recreational River in South Dakota, 1892-2006 - *Mark Dixon*
7. Changes in the diversity and structure of Great Lakes bird communities in response to land cover change - *Jay Roberts*
8. Evaluating habitat use and connectivity using occupancy and density indices - *Tammy Wilson*
9. The Effects of Wetland Habitat and Landscape Connectivity on Amphibian Distributions - *William Fields*
10. Modeling Landscape Connectivity for Elephants in Botswana - *Sam Cushman*
11. Tucson's lost wetland plant species: where are they now? - *Kathryn Mauz*
12. *Bufo boreas* habitat preference at two spatial scales: the dual significance of microhabitat characteristics and landscape connectivity - *Michel Ohmer*
13. Predicting Desert Tortoise Habitat - *Kathryn Thomas*
14. Multi-scale Habitat Relationships Modeling of American Marten in Northern Idaho - *Tzeidle Wasserman*
15. Evaluating the influence of lure and bait type on track plate visitation by American Marten in central Ontario, Canada - *Peter Quinby*
16. Towards a Biodiversity Assessment of the Pacific Rim: Predictive Large-scale GIS-Modelling of Brown Bear Distribution (Canada, Alaska, Russian Far East and Japan) in Estuaries using compiled Public Coastal Data and TreeNet. - *Falk Huettmann*
17. Maximization of Shannon Diversity under Energetic Constraint Explains the Partitioning of Species Richness among Vertebrate Taxa in North America - *David Dean*
18. Edge detection along the administrative and wilderness boundaries of the Kenai National Wildlife Refuge, Alaska - *John DiBari*
19. Biodiversity of Trans-Himalayas With Special Reference to High Altitude Wetlands of Ladakh, India - *Pankaj Chandan*
20. Conservation planning for fish assemblages based on land cover distribution - *Peter Schweizer*
21. Nitrogen Transfer From Agroecosystems To Forests: White-Tailed Deer Foraging In Multiple-Use Landscapes - *Steve Seagle*
22. Prioritizing forest restoration based on late-seral habitat connectivity - *William Richards*
23. Simulation of Annual Net Primary Production and its response to global change for *Leymus chinensis* Steppe in Xilin River Basin in Inner Mongolia, China - *Fei Yuan*
24. Simulating the Effects of Climate Changes on Far East Boreal Forests - *Ningning Zhang*
25. Self-Organizing Map and Fuzzy ARTMAP neural network based species habitat distribution modeling - *Zhe Li*
26. Effect of Landscape Fragmentation on avian diversity in the Edwards Plateau of Texas - *Edith Gonzalez*
27. Southwest Regional Gap Analysis Project - *Ken Boykin*

28. An integrated approach to map forest conditions in southern Appalachians - *Wieman Xi*
29. Using land surface phenology to explore the effects of landscape and riparian features on nutrient discharges in tributary watersheds of Chesapeake Bay - *Matthew Baker*
30. Understanding the effects of Plot Size on Scale and Patterns of Plant Species Richness: A Landscape-Scale Assessment Approach Using Geospatial Information and Spatial Statistics - *Mohammed Kalkhan*
31. Geospatial modeling of fire-size distributions in historical low-severity fire regimes - *Lara-Karena Kellogg*
32. Tree Ringlets: Time- and Space-dependent Tree Growth in Strahler Stream Networks - *Bruce Milne*
33. Coupling of climate, soil moisture dynamics, and vegetation in a small basin in a semi-arid landscape - *Etsuko Nonaka*
34. Landscape configuration affects the energy intake rates of foragers: An agent-based approach to optimal foraging in heterogeneous landscapes- *Etsuko Nonaka*
35. The role of patch area and habitat edges in fragmented landscapes: definitively distinct or inevitably intertwined? - *Robert Fletcher*
36. Passive microwave products can reveal the land surface phenology of moisture stress in Great Plains landscapes – *Geoff Henebry*
37. Relating distance-weighted measures of landscapes to water quality: Does distance matter? - *Jeffrey Hollister*
38. Evaluating post-wildfire vegetation dynamics across semi-arid sites in Spain, Israel, and the United States – *Grant Casady*
39. Fuel Treatment Effectiveness in the United States - *Michael Wimberly*
40. FIREHARM: a spatially explicit fire hazard model used to map fire severity - *Eva Karau*
41. Phenological metrics and their response to drought in Arizona: The Santa Rita Mountains - *Jennifer Davison*
42. Historical and Current Patterns of Flowering Phenology in the Phoenix Metropolitan Area - *Kaesha Neil*
43. Public Interpretation of Urban Bird Habitat Design Guidelines on a Self-Guided Tour of the University of Arizona Campus in Tucson, AZ - *Hampton Uzzelle*
44. A Hierarchical Framework for Examining Coupled Human-Biophysical Processes in Urban Ecosystems – *Steven Walters*

## KEYNOTE SPEAKER PROFILES

### US-IALE 2007 Annual Symposium

**Tuesday, April 10 at 8:30 AM**

**Plenary Address- Ghost Forests, Grizzly Bears, and the Mountain Pine Beetle: the Spiraling Consequences of Climate Change**

#### **Dr. Jesse Logan - EnviroWise Design**



After finishing his PhD at Washington State University, Jesse Logan held faculty positions at Colorado State University and Virginia Polytechnic Institute and State University. He then joined the Forest Service as Project Leader for the Interior West Bark Beetle Project in Logan, Utah. He is currently an ecological consultant with EnviroWise Design in Emigrant, Montana. His primary research interests are quantitative insect ecology, dynamical systems theory and analysis, and historical ecology. Currently, he is almost exclusively applying these interests to landscape issues involving high-elevation (whitebark pine) ecosystems of the northern U.S. Rocky Mountains.

#### **Plenary Abstract:**

Unprecedented outbreaks of a variety of native bark beetles are presently occurring across the forests of western North America. These outbreaks include the massive die-off of piñon pine in the south west, devastating outbreaks of spruce beetle in Alaska and massive mountain pine beetle outbreaks in Canada. All of these outbreaks share a common underlying relationship to the warming trend that began in the western U.S. during the mid 1970s. Among the most disturbing of these events is the catastrophic mortality resulting from mountain pine beetle (MPB) in high elevation pine (whitebark pine) forests of the northern U.S. Rockies. These outbreaks are particularly significant because whitebark pine forests have not co-evolved with outbreak bark beetle disturbance, and as a result, are in danger of being lost over much of their current range.

Whitebark pine is of particular importance in the Greater Yellowstone Ecosystem (GYE), because as one of four critical food resources for grizzly bears, it is inexorably linked to recovery of this endangered species. Motivated by the ecological and cultural importance of the GYE, and also by questions regarding the future of grizzly bear habitat, we performed computer simulations of MPB outbreak risk for the GYE using both historical data and projected climate change scenarios. Simulation results identified areas of whitebark pine that were predicted not to be at high risk for MPB outbreaks. In this respect, the Wind River Mountains were unique in two ways: they were predicted to (1) have not suffered the widespread MPB mortality that occurred during the warm period of the 1930s; and (2) in contrast to most of the whitebark pine habitat in the GYE, not to be at risk under climate change scenarios projected to end of century.

In order to evaluate simulation results, we conducted a Wind River reconnaissance trip that involved four phases: (1) aerial over flight; (2) landscape assessment from identified vantage points; (3) stand evaluation of identified mortality; (4) general observations from a ten days traverse of whitebark pine habitat. Results from this reconnaissance found no evidence for the widespread outbreaks that occurred elsewhere during the 1930s; and that current conditions indicate a healthy functioning ecosystem that contains all critical elements for temporal continuity. Additionally, we found no evidence of white pine blister rust (an exotic pathogen that has had devastating effects over much of whitebark pine distribution).

Results from our Wind River reconnaissance are encouraging because they indicate that our landscape model may provide a valuable tool for developing climate change mitigation strategies across the entire distribution of whitebark pine. By identifying low-risk areas, like the Wind River Mountains, conservation strategies can be targeted to whitebark pine habitats with the highest probability of success. Additionally, our results indicate that current conservation strategies for grizzly bear recovery need to be flexible in meeting the changes in critical habitat resulting from climate change. In particular, the current grizzly bear core recovery area is based entirely on historical information that ignores the reality of climate change impacts. Our results indicate how this core area could be modified to accommodate this evolving reality.

**Thursday, April 12 at 8:30 AM**

**Plenary Session – Wildland Fire as a Forest Landscape Process - Problems of Scale**

### **James Agee - University of Washington**

Dr. Agee is Virginia and Prentice Bloedel Professor of Forest Ecology at the College of Forest Resources, University of Washington. His research focuses on disturbance ecology, and specifically the role of fire in forest ecology. A major conservation biology issue is how to reintroduce natural disturbances like fire into ecosystems that may have been altered by fire exclusion, grazing, and logging.

Current projects he is involved with, together with graduate students, research associates, and colleagues here and at other institutions include:



- Fire and bark beetle mortality in old pine forests at Crater Lake National Park
- Effects of coarse woody debris on reintroduction of fire in young dry site forests
- Effect of thinning and burning on alien understory species in pine forests
- Optimizing landscape level-fuel treatments
- Effects of thinning and burning on ecosystem processes (a national project called Fire and Fire Surrogates, with 13 sites nationwide)

## **Plenary Abstract:**

Fire has been an important historical landscape process and will remain so in the future. Identifying deviations from historic landscape character, and the potential for "uncharacteristic fire", have many scaled-based issues that are often overlooked in the evaluation process. The first is the concept of the fire regime, which tends to be somewhat clear for low-severity and high-severity fire regimes, but incredibly fuzzy for mixed-severity fire regimes. Depending on how severity levels are defined, almost any historic fire or current fire can be defined as mixed-severity. At stand scales, there are several tools available to evaluate fire behavior and effects. The First-Order Fire Effects Model (FOFEM) tends to overpredict prescribed fire effects because it assumes 100% coverage of every fire. The prediction of crown fire potential is quite dependent on scale. Torching that is quite predictable at a small plot scale may be "eliminated" at larger scales by averaging plots with high canopy base heights with those with very low canopy base heights. Independent crown fire potential is defined using quite crude models, and must be evaluated against local weather, rather than arbitrary thresholds, to be realistic. Fragmenting wildfire behavior at landscape scales must address the questions of how much landscape to treat, where to treat, and how often to treat. Choice of a metric to measure success (spread, flame length) is also important. While existing models are in need of refinement, probably a more critical need is intellectual honesty in the interpretation of model results.

**Friday, April 13 at 10:20 AM**

## **Plenary Symposium- Toward a Collective Disciplinary Agenda for Landscape Ecology: Goals and Strategies**

Featuring:

**Bruce T. Milne, University of New Mexico**  
**Richard T. T. Forman, Harvard University**  
**John A. Wiens, The Nature Conservancy**  
**Robert H. Gardner, University of Maryland**

## **Background and Goals:**

Since the 1980s, landscape ecology has enabled virtually all public and private land management agencies to assess landscape pattern, connectivity, and flows of organisms and resources at multiple scales. In the face of declining oil supplies and global change, many environmental professionals can expect to spend the remainder of their careers engaged in concerted efforts to supply society with renewable energy, clean water, and food while protecting habitat, ameliorating production of greenhouse gases, and managing the proliferation of exotic and pathogenic species. Indeed, all landscapes are connected via the atmosphere, and thus landscape ecology is central to engineering effective greenhouse gas reduction strategies and to the implementation of valid carbon cap and trade systems. With contributions from practitioners, social, political and economic sciences and the arts, landscape ecology could help to alleviate environmental racism and reduce overexploitation of wild lands and endangered habitats. During the descent from fossil fuel, landscape ecology could reinvigorate local production of food and biofuels while maintaining



biodiversity via educational outreach and collaborations with professional organizations of planners, architects, developers and farmers. Engagement with commercial media arts and computer scientists could lead to powerful visualization interfaces for simulations, thereby helping stakeholders to participate in scenario-based landscape planning exercises. This symposium will highlight the successes of landscape ecology to date and the potential for creative landscape initiatives in response to environmental challenges. The presenters and audience will be invited to convene afterwards to outline a proposal to the IALE North American Chapter to identify key initiatives that can be disseminated widely and used strategically to help funding agencies justify support for mission-oriented landscape ecological research.

**Symposium Design:**

10:00am-10:10am	Bruce T. Milne. Introduction: A Collective Disciplinary Agenda for Landscape Ecology - Goals and Strategies
10:10am-10:30am	Richard T. T. Forman. The Legacy of Landscape Ecology
10:30am-10:50am	John A. Wiens. Successes of Landscape Ecology in Conservation
10:50am-11:10am	Bruce T. Milne. Proactive Landscape Research and the Descent from Oil
11:10am-12:00pm	Group discussion using the "open space community" approach method that facilitates spontaneous group formation, topic identification, and critique, leading to prioritized suggestions for further action.

## **AWARDS**

### **US-IALE 2007 Annual Symposium**

#### **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 \$1000 travel award to a promising landscape ecologist, Diana Useche.

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 have been critical to success of the auction. Please continue your support of the FSTA by participating in the book auction and patronizing the booksellers and exhibitors.

The FSTA committee for 2007 consisted of Sam Riffell (Committee Chair, Mississippi State University), John Bissonette (Utah State University), Sarah Gergel (University of British Columbia), Elena Lioubimtseva (Grand Valley State University), and Jianguo Wu (Arizona State University). Ex officio members: Robert Gardner (US-IALE President), Margaret Livingston (US-IALE Treasurer).

#### **2007 US-IALE Foreign Scholar Travel Award Recipient**

Diana Useche is a landscape ecologist with the Tropical Agricultural Research and Higher Education Center in Costa Rica. Diane will share her research about ecological connectivity in grazing systems of Central America. I know she and her colleagues in Costa Rica are honored and looking forward to her visit with us in Tucson.

#### **NASA-MSU Professional Enhancement Awards Program**

The NASA-MSU Professional Enhancement Awards are available to some outstanding students who give oral or poster presentations at the Annual Conference of the U.S. Regional Association of the International Association for Landscape Ecology (US-IALE). These special awards are made possible by the support from the National Aeronautics and Space Administration (NASA) and Michigan State University (MSU).

Applications are judged based on the merits of the applicants' abstracts, financial needs, and professional backgrounds and goals. Each year approximately 20 awards are given for the selected students to cover expenses associated with attending the conference. The awardees have opportunities to meet with some leading landscape ecologists at a special dinner, to learn the latest developments in landscape ecology, and to build professional networks with other conference attendees.

The NASA-MSU Program is now 10 years old. To celebrate its 10th anniversary and to remember two great former mentors (Dr. Frank Golley and Dr. Eugene Odum), the Program has sponsored two "NASA-MSU Golley-Odum Workshops" and three "NASA-MSU Golley-Odum Symposia" (organized by a number of former awardees) at the 2007 US-IALE conference. All conference attendees are welcome to participate in these workshops and symposia.

The NASA-MSU Awards Committee in 2007 consists of Jianguo (Jack) Liu (Chair), Garik Gutman (NASA), Sherrie Lenneman (MSU), Shuxin Li (MSU), Anita Morzillo (USEPA), and William Taylor (MSU).

**Recipients of NASA-MSU Professional Enhancement Awards (2007)**

<b><u>Awardees</u></b>	<b><u>Institution</u></b>
Albright, Tom	University Wisconsin-Madison
Bodamer, Betsy	The University of Toledo
Cagle, Nicolette	Duke University
Campanella, Andrea	New Mexico State University
Collins, Cathy	University of Kansas
Drewes, Annette	University Wisconsin-Madison
Foster, Jane	University Wisconsin-Madison
Kenny, Natasha	University of Guelph
La Puma, Inga	Rutgers University
Lasky, Jesse	University of Texas at Austin
Li, Zhe	Clark University
Lippitt, Christopher	San Diego State University
Napoletano, Brian	Purdue University
Niphadkar, Madhura	San Diego State University
Peterson, Nils	Michigan State University
Questad, Erin	University of Kansas
Schneiderman, Jacqueline	University of Missouri
Spear, Stephen	Washington State University
Vigness Raposa, Kathleen	University of Rhode Island

## Complete List of NASA-MSU Professional Enhancement Awardees from 1998-2006

### 1998 Award Winners

<b>Name</b>	<b>Institution</b>
Joseph Bodie	University of Missouri - Columbia
Chi-ru	Duke University
Shelley Ann Church	Oregon State University
Joseph Cornell	SUNY College of Environmental Science and Forestry
Steven Friedman	University of Minnesota
Nancy Golubiewski	Duke University
Stephanie Gripne	Utah State University
Anna Hersperger	Harvard University
Falk Huettmann	University of New Brunswick
Sinkyu Kang	Seoul National University, South Korea
Jay Martin	Louisiana State University
Steven McConnell	University of Idaho
Nancy McIntyre	Colorado State University
Franz Mora	University of Nebraska - Lincoln
Bill Richards	Western Washington University
Ramesh Sivanpillai	Texas A & M
Brian Sturtevant	University of Maryland
Jen Theberge	University of Calgary, Canada
Jeffrey Villepique	Syracuse University
Xiangyue Wei	Southern Illinois University - Carbondale
Frida Haruko Oda Woolrich	University of Nebraska - Lincoln
Wanli Wu	University of Nebraska - Lincoln

### 1999 Award Winners

<b>Name</b>	<b>Institution</b>
Jeff Bowman	University of New Brunswick, Canada
Laurie Carr	Carleton University, Canada
Grace Chen	University of Iowa
Marlene Cole	Rutgers University
Thomas Contreras	Carleton University, Canada
Robert Corry	University of Michigan
C. Lisa Dent	Arizona State University
Martin Dovciak	University of Minnesota
Jessemine Fung	Iowa State University
Jerry Griffith	University of Kansas
Ayako Kimura	Hiroshima University, Japan
Dihua Li	Peking University, China
Mark McClure	Utah State University
Laura Musacchio	Arizona State University
Samuel Riffell	Michigan State University
Gerardo Sanchez-Rojas	Institute of Ecology, Mexico
Lisa Schulte	University of Wisconsin
Rodney van der Ree	Deakin University, Australia
Helene Wagner	Swiss Federal Institute for Forest, Snow and Landscape, Switzerland
Martin Wilmking	University of Alaska - Fairbanks
Jialong Xie	Michigan State University

### **2000 Award Winners**

<b>Name</b>	<b>Institution</b>
Jonathan Bossenbroek	Colorado State University
Andy Bunn	Duke University
Rebecca Cifaldi	University of Georgia
Jennifer Fraterrigo	Colorado State University
Michelle Hawks	Colorado State University
Rebecca Kennedy (Hess)	Oregon State University
Meg Krawchuk	Acadia University, Canada
Edward Laurent	Indiana-Purdue University
Marc Linderman	Michigan State University
Katja Meinke	University of Massachusetts
Leslie Parris	Clemson University
Anna Pidgeon	University of Wisconsin-Madison
Kenneth Pierce	Duke University
Daniel Smith	University of Florida
Véronique St-Louis	University de Montreal, Canada
Steven Walters	University of Maryland
Michael Winslow	University of Vermont

### **2001 Award Winners**

William Adair	Utah State University
Juliann Aukema	University of Arizona
Mateus Batistella	Indiana University
David Bean	University of British Colum
Robert Beaty	Pennsylvania State University
Kathryn Bickel	Duke University
Mark Dixon	University of Wisconsin-Madison
Karen Eisenreich	Clemson University
Eugénie Euskirchen	Michigan Technological University
Linhai (Larry) Guo	University of Wollongong, Australia
Geoffrey Hay	Universite de Montreal, Canada
Aaron Hoffman	Colorado State University
Jeffrey Hollister	University of Rhode Island
Mevin Hooten	University of Missouri
Josie Hughes	Simon Fraser University, Canada
Daniel Kashian	University of Wisconsin-Madison
Sandra Kosek-Sills	University of Michigan
Jeremiah Lindemann	University of Wyoming
Todd Lookingbill	Duke University
Scott Powell	Montana State University
Robert Schooley	Colorado State University
Elizabeth Springborn	University of Kentucky
Jianwu Tang	University of California - Berkeley

### **2002 Award Winners**

Matthew Baker	University of Michigan
Ernesto Camelo de Castro	Arizona State University
Tom Carlson	Montana State University
Patrice Cole	The University of Tennessee - Knoxville
Russell Feagin	Texas A & M University
Robert Fletcher	Iowa State University
Todd Hawbaker	University of Wisconsin - Madison
Christopher Hiemstra	University of Wyoming
Teresa Hollingsworth	University of Alaska - Fairbanks
Ramesh Krishnamurthy	Wildlife Institute of India

Pey-Yi Lee	University of California - Riverside
Christopher Lepczyk	Michigan State University
Robert McDonald	Duke University
Monique Rocca	Duke University
Denise Royle	Rutgers University
Robert Scheller	University of Wisconsin - Madison
Kristi Simpson	Clemson University
Matthew Thomas	University of Wisconsin-Madison
Luigi Torretti	Northern Michigan University
Kerrie Wilson	Univeristy of Melbourne, Australia

### **2003 Award Winners**

Joao Azevedo	Texas A&M University
Daniel Bain	Johns Hopkins University
Mang Lung Cheuk	Clark University
Tenley Conway	Rutgers University
Samuel Cushman	University of Massachusetts
Markus Didion	Simon Fraser University
Silvio Ferraz	University of Sao Paulo/Colorado State University
Nan Hong	North Carolina State University
Dong Ko	University of Missouri-Columbia
Eliot McIntire	University of British Columbia
Michael Miller	Purdue University
Jennifer Miller	San Diego State University
Emily Minor	Duke University
Anita Morzillo	Michigan State University
L. Monika Moskal	University of Kansas
Michelle Steen-Adams	University of Wisconsin-Madison
Jennifer Valiulis	Colorado State University
Eric White	Michigan State University
Peter Witucki	Franklin and Marshall college
Jeffrey Yuen	University of Calgary

### **2004 Award Winners**

Scott Bearer	Michigan State University
Mary Bresee	University of Toledo
Douglas Bruggeman	Michigan State University
Henry Bulley	Kenya (University of Nebraska - Lincoln)
Samuel Codjoe	University of Bonn, Germany
Kristen de Beurs	University of Nebraska - Lincoln
Larry Feinstein	University of Akron
Katia Ferraz	University of Sao Paulo, Brazil
Lara-Karena Kellogg	University of Washington
Todd Kipfer	Montana State University
Kimberly Mattson	Virginia Polytechnic Institute & State University
Etsuko Nonaka	Japan (Oregon State University)
Lance Roberts	Michigan State University
Tyler Rychener	Arizona State University
Hoski Schaafsma	Arizona State University
Alison Seigel	Rutgers, the State University of New Jersey
Namrata Shrestha	St. Cloud State University
Jennifer Skillen	Michigan State University
Abigail Vitale	University of Georgia
Silke Werth	Swiss Federal Research Institute, Switzerland

**2005 Award Winners**

Lauren Bailey	Michigan State University
Qi Chen	University of California, Berkeley
Ashton Drew	North Carolina State University
Matthew Fitzpatrick	University of Tennessee
Guangming He	Michigan State University
Kristen Hychka	Penn State University
Katherine Kahl	Michigan State University
Christine Kassar	Utah State University
Kathryn Mauz	University of Arizona
Susan Mulley	University of Guelph/ Mississippi State University
Melanie Murphy	Washington State University
Jeanine Rhemtulla	University of Wisconsin-Madison
Jill Robertson	University of Guelph
Ximena Rueda	Clark University
Joseph Sexton	Duke University
Daniel Somma	Administracion de Parques Nacionales, Argentina
Yolanda Wiersma	University of Guelph
Kana Yamagishi	Hokkaido University, Japan
Jian Yang	University of Missouri-Columbia
Nicola Zaccarelli	University of Lecce, Italy
Tingting Zhao	University of Michigan

**2006 Award Winners**

Maria Arienti	University of Alberta
Tanushree Biswas	Utah State University
Theresa Burcsu	Indiana University
Chrissa Carlson	University of Georgia
Andrea Chavez	University of Florida
Sarah Fischer	University of North Dakota
Emilie Grossmann	University of Wisconsin-Madison
Melanie Harsch	Frostburg State University
Susan Hazlett	University of Alaska Fairbanks
Vaneessa Hull	Michigan State University
Ziying Jiang	Clark University
Sadahisa Kato	University of Massachusetts , Amherst
Elizabeth Levitt	University of Wisconsin-Madison
Diego Varga	University of Girona
Wei Liu	Michigan State University
Matthew Luck	University of New Mexico
Andrew Rayburn	Iowa State University
Maria Santos	University of California , Davis
Michelle Smith	University of Montana
Steven Stoddard	University of Illinois at Urbana-Champaign
Jason Taylor	University of Michigan
Karin Tuxen	University of California , Berkeley
Tammy Wilson	Utah State University

## ACKNOWLEDGEMENTS

### US-IALE 2007 Annual Symposium

#### Organizing Committee:

Bob Keane, US Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory  
 John DiBari, Sonoran Institute  
 Don McKenzie, US Forest Service, Pacific Wildland Fire Sciences Laboratory  
 Cindy Delaney, Delaney Meeting & Event Management

#### Student Volunteers:

Deahn Donner Wright, U.S. Forest Service, Northern Research Station; Kim Mattson; and Gaylord Nelson  
 Institute of Environmental Studies, University of Wisconsin, Madison

#### Web Site Maintenance and Hosting:

We thank Matthew Gregory and Rebecca Kennedy, Oregon State University; and Jacey Garceau, Delaney Meeting & Event Management for maintaining the conference web site and hosting it on the US-IALE web site.

#### Exhibitors & Supporters -We are grateful to the following institutions for their support:

U.S. Forest Service, Rocky Mountain Research Station  
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 Dr. James Agee, University of Washington

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### **US-IALE 2006 Annual Symposium**

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W: [www.cambridge.org/us](http://www.cambridge.org/us)

*Cambridge University Press will be represented at the meeting by acquisitions editor Alan Crowden, and there will be a wide selection of titles of interest to landscape ecologists on display. The Cambridge Studies in Landscape Ecology, published in association with IALE, will be central to the exhibit. Other new and recent titles in ecology and conservation biology will also be featured.*

#### **Clark Labs**

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*Clark Labs is best known for the IDRISI GIS and Image Processing software. The latest version, IDRISI Andes, introduces a vertical application called the Land Change Modeler for Ecological Sustainability. Tools are provided for analyzing land cover changes, projecting its course into the future and assessing its implications for habitat and biodiversity change.*

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