

Thursday, 3 December

Day 4

**0800-0920 Welcome and Plenary Sessions**

**Savannah Ballroom**

(See Scientific Program Plenary Session Schedule on page 7)

0920-0950

Break

**Joint Fire Science Program – Social Sciences and Decision Support**

**Savannah B**

- 0950-1010 Public Views of Fire Management From Prescribed Fire to Suppression.  
1015-1035 Risk Assessment and Decision Support From Prescribed Fire to Suppression  
1040-1150 Management Panel

Sarah McCaffrey  
Carol Miller  
Nora Devoe, Judith  
Downing, Alan Dozier

**Integrating Science and Management**

**Savannah C**

- 0950-1010 Are Phenolic Compounds Relevant Bioindicators to Evaluate the Effects of Prescribed Burnings?  
1015-1035 talk was cancelled  
1040-1100 Effectiveness and Implications of an Imazapic Herbicide Application to Reduce Post-Fire Cheatgrass Invasion in Zion National Park  
1105-1125  
1130-1150 Ten Years of Challenges and Successes in Fire Management With the U.S. Army, Hawaii

Magali Cannac  
  
Marybeth Garmoe  
  
Andrew M. Beavers

**Effects of Fire Management on the Carbon Sequestration Capacity of Forested Ecosystems with Frequent Surface Fire Regimes**

**Savannah D**

- 0950-1010 The Influence of Long Term Prescribed Fire Management Regimes on Soil Carbon Respiration in Southern Forests  
1015-1035 Fire Effects on Carbon Sequestration in Forests with Frequent Surface Fire Regimes  
1040-1100 Effects of Fire Surrogates on Carbon Sequestration in Forests with Frequent Surface Fire Regimes.  
1105-1125 Modeled and Actual Impacts of Fire Management on Carbon Sequestration and Greenhouse Gas Emissions in Yosemite National Park  
1130-1150 Fire Management and Carbon Sequestration: Conflicting or Complimentary Land Management Priorities?

David Godwin  
Matthew D. Hurteau  
Ralph E.J. Boerner  
Leland W. Tarnay  
Matthew L. Brooks

**Frontier Fire in the Amazon: Forest Susceptibility and Vulnerability**

**Savannah E**

- 0950-1010 Moisture Dynamics of Leaf Litter in a Moist Tropical Rainforest System: Linking Easily Obtained Measures with Fire Susceptibility

Paulo Brando

1015-1035	<u>Experimental Understory Fires Reduce Carbon Stores by Loss of Sub-canopy Stems in Residual Forests of the Southern Amazon's Agricultural Frontier</u>	Jennifer Balch
1040-1100	<u>Post-fire Tree Mortality in a Tropical Forest of Brazil: The Role of Bark Thickness, Wood Density, and Tree Size.</u>	Paulo Brando
1105-1125	<u>Temporal Variability of Amazon Forest Fires: Implications for Forest Degradation and Carbon Emissions</u>	Ane Alencar Rafaella A. Silvestrini
1130-1150	<u>A Fire Model for the Xingu Headwaters: Ignition, Spread and Interactions with Carbon Stocks</u>	
<b>A Multi-disciplinary Approach to Fire Strategy, Suppression Costs, Community Interaction and Organizational Performance</b>		<b>Oglethorpe A &amp; B</b>
0950-1010	<u>Effect of Management Objectives and Strategies on Suppression Expenditures</u>	Krista M. Gebert
1015-1035	<u>The Key Decision Log – Developing and Testing One Aspect of a ‘Balanced Scorecard’ to Facilitate Continuous Improvement in Fire Management.</u>	Anne Black
1040-1100	<u>Community-Agency Interaction Before and During Wildfire Events: Lessons from 2008.</u>	Sarah McCaffrey
1105-1125	<u>Integrating Understanding: How Multiple Perspectives Enhance Fire Research</u>	Anne Black
<b>Grassland Fire</b>		<b>Plaza</b>
0950-1010	<u>Changing the Role of Fire: Historic and Current Patterns on Nine Grassland Units in the Great Plains</u>	Mary Lata
1015-1035	<u>Influence of Scale of Fuel Patchiness on Fire Behavior in Grass Fuelbeds</u>	David M. Engle Michael C. Stambaugh
1040-1100	<u>Progress in Developing a Network of Fire Scar History Research Sites in the Great Plains</u>	Richard P. Guyette
1105-1125	<u>Great Plains Fire Frequency Modeling and Climate Calibration</u>	David M. Engle
1130-1150	<u>A Model for Returning Prescribed Burning to Working Lands of the Midwest</u>	
<b>Landscape Level: Fire Regimes</b>		<b>Academy</b>
0950-1010	<u>Critique of Superposed Epoch Analysis for Fire History Studies</u>	Elaine K. Sutherland
1015-1035	<u>Spatial and Temporal Characterization of Forest Fires and Fire Danger Rating Over India Using Satellite Remote Sensing Data</u>	T.R. Kiran Chand
1040-1100	<u>Accurate Quantification of Seasonality Improves Understanding of Climate-Wildfire Relationships.</u>	Matthew G Slocum
1105-1125	<u>Fine-scale Mapping of Historical Fire Regimes</u>	Cecil Frost
1130-1150	<u>Using a Neutral Model to Estimate Spatial Structure in Historical Low-severity Fire Regimes</u>	Donald McKenzie

<b>Research with Management Recommendations: Flora</b>		<b>Pulaski</b>
0950-1010	<u>Minimizing Wildfire Impacts to Endangered Species in Hawaii</u>	Dawn Greenlee
1015-1035	<u>talk was cancelled</u>	
1040-1100	<u>Effects of Herbicide Applications and Native Seeding on the Post-fire Seed Bank of a <i>Bromus tectorum</i> Infected Pinyon-juniper Woodland.</u>	Hondo Brisbin
1105-1125	<u>Effects on Native Plant Regeneration and Understory Community Response Following a Post-fire Seeding of <i>Lolium multiflorum</i> in a Ponderosa Pine Forest in Northern Arizona</u>	Melissa A. McMaster
1200-1330	Lunch	
<b>Joint Fire Science Program – Fire Behavior and Smoke Management</b>		<b>Savannah B</b>
1330-1350	<u>Summary of JFSP Fire Behavior Research Accomplishments and Some Future Directions</u>	Mark A. Finney
1355-1415	<u>Rapid Evolution of Smoke Management Tools: Ten-years of Joint Fire Science Program Sponsored Research</u>	Scott Goodrick
1420-1530	<u>Management Panel</u>	Erik Christiansen, Pete Lahm and Gary Curcio
<b>Integrating Science and Management</b>		<b>Savannah C</b>
1330-1350	<u>The National Fire and Fire Surrogate Study: A Synthesis of Results among Study Sites and Disciplines</u>	Thomas A. Waldrop
1355-1415	<u>Fuel Reduction Treatments for Pine Flatwoods of the Southeast</u>	Kenneth W. Outcalt
1420-1440	<u>Fire and Fire Surrogate Study: Management Implications for Oak-Dominated Sites</u>	Daniel A. Yaussy
1445-1505	<u>Effects of Fuel Reduction Treatments on Levels of Delayed Tree Mortality Attributed to Bark Beetle Attack in Western Coniferous Forests</u>	Chris Fettig
1510-1530	<u>Thinning and Burning in Dry Coniferous Forests of the Western US: Effectiveness in Altering Diameter Distributions</u>	Andrew Youngblood
<b>Carbon, climate change, and fire management</b>		<b>Savannah D</b>
1330-1350	<u>Effects of Fuel Treatments on Carbon Stocks and Fire Emissions in Forests of the Northern Rocky Mountains</u>	Elizabeth Reinhardt
1355-1415	<u>Quantifying Age-based Forest Carbon Dynamics to Estimate Effects of Fire Rotations on the Carbon Balance: A Multi-scale Empirical Approach</u>	Crystal Raymond
1420-1440	<u>Fire Management Effects on Carbon Dynamics and Forest Structure Under Climate Change in Olympic National Park, WA, USA</u>	Rebecca S.H. Kennedy
1445-1505	<u>Carbon Dynamics of Complex Landscapes: Simulating Effects of Climate Change, Fire, and Vegetation Succession on Terrestrial Carbon Storage</u>	Rachel A. Loehman

1510-1530	<u>Interaction of Fire Regimes and Post-fire Regeneration on Carbon Storage in the Pacific Northwest</u>	Erica A.H. Smithwick
<b>Reducing large tree mortality from fire in long-unburned forests</b>		<b>Savannah E</b>
1330-1350	<u>The Challenge of Reintroducing Prescribed Burns to Long-unburned Fire-dependent Ecosystems</u>	J. Kevin Hiers
1355-1415	<u>Prescribed Fire Site Characteristic Effects on Soil and Cambium Temperatures</u>	Sally M. Haase
1420-1440	<u>The Effects of Smoldering Duff Fires on Growth and Stress in Longleaf Pine</u>	J. Morgan Varner
1445-1505	<u>Duff Mound Consumption and Cambial Damage From Prescribed Burning Centuries-old Western Larch (<i>Larix occidentalis</i>)</u>	Michael G. Harrington
1510-1530	<u>Post-fire Mortality and Resin Defenses in Old Ponderosa Pines, Crater Lake, Oregon</u>	James K. Agee
<b>A Multi-disciplinary Approach to Fire Strategy, Suppression Costs, Community Interaction and Organizational Performance</b>		<b>Oglethorpe A &amp; B</b>
1330-1350	<u>Assessing the Impact of Fire Suppression on Area Burned – What’s the Problem?</u>	David L. Martell
1355-1415	<u>Burning Issues: Assessing the Ecological Effects of Suppression Firing Operations</u>	Timothy Ingalsbee
1420-1440	<u>Beyond Wildfire: Perspectives of Climate, Managed Fire and Policy in the USA</u>	Crystal Kolden
1445-1505	<u>Integrating Science, Technology, and Fire Management- Improving Decision Making</u>	Morgan Pence
1510-1530	<u>Influences to Integration of Management and Science: Understanding Potential Science Users</u>	Vita Wright
<b>Grassland Fire</b>		<b>Plaza</b>
1330-1350	<u>Restoring Fire to the Prairies and Plains: Lessons from the Great Plains Fire Learning Network</u>	John Ortmann
1355-1415	<u>Perennial Grass Mortality after the East Amarillo Complex Wildfires</u>	Sandra Rideout-Hanzak
1420-1440	<u>Annual Net Primary Production after the East Amarillo Complex Wildfires</u>	David B. Wester
1445-1505	<u>Predicting Grassland Wildfire Danger</u>	Micah-John Beierle
1510-1530	<u>Fire and Plant Community Dynamics in the Western Australian Desert.</u>	Tom Bragg
<b>Landscape Level: Fire Regimes</b>		<b>Academy</b>
1330-1350	<u>Modelling spatial, temporal, and stochastic variability of natural forest fire size class distribution</u>	Wenbin Cui
1355-1415	<u>Fire and Piñon Pine (<i>Pinus monophylla</i>) on the west slope of the Sierra Nevada, Kings Canyon National Park.</u>	Anthony C. Caprio
1420-1440	<u>Snag Retention, Wildlife Usage, and Surface Fuel Deposition Following Large, Stand-Replacing Wildfires in Dry Coniferous Forests</u>	Erich Dodson
1445-1505	<u>Long-term Forest Dynamics in Mediterranean Mountains (Corsica, France)</u>	Lila Ferrat
1510-1530	<u>Varying Constraints on Global Fire Activity</u>	Meg A. Krawchuk

<b>Role of Technology</b>		<b>Pulaski</b>
1330-1350	<u>Scalable Canopy Fuels Estimates from Airborne Laser Scanner-derived Tree Stems</u>	Carl Seielstad
1355-1415	<u>Using the Burning Risk Advisory Support System (BRASS) to Assess Fire Effects in Grasslands</u>	Jason S. Jones, William Shaw, Edward C. Rhodes
1420-1440	<u>Relating Forest Fuelbed Structure and Fire Temperature using Ground-LIDAR, Thermal Imaging, and Spatial Models</u>	E. Louise Loudermilk
1445-1505	<u>Enhancement of LANDFIRE Vegetation Products Through Incorporation of Active Remote Sensing Data</u>	Birgit Peterson
1530-1600	Break	
<b>Joint Fire Science Program – Future Fire Research Needs &amp; Closing</b>		<b>Savannah B</b>
1600-1645	<u>Views on Future Research Needs Panel</u>	Robert Farris, Paula Seamon, Chris Topik
1650-1800	<u>What are the Future Fire Science Priorities? What Kinds of Changes are Needed to Address These Priorities?</u>	Jim Agee
<b>The National Fire and Fire Surrogate Study: A Synthesis of Results among Study Sites and Disciplines</b>		<b>Savannah C</b>
1600-1620	<u>Effects of Alternative Fuel Reduction Treatments on Vertebrate and Invertebrate Species</u>	James McIver
1625-1645	<u>Fuel Treatment Effects on Stand Level Carbon Pools and Fire Risk from Coniferous Forests in Montana, Oregon, California, and Arizona</u>	Scott Stephens
1650-1710	<u>The National Fire and Fire Surrogate Study: Effect of Alternative Fuel Reduction Methods on Forest Vegetation, Structure, and Fuels</u>	Dylan Schwilk
1715-1735	<u>Objectives and Outcomes of the FFS Study: A Synthesis</u>	Ralph E.J. Boerner
1740-1800	<u>Panel Discussion</u>	
<b>Global Patterns of Fire History and Climate Change</b>		<b>Savannah D</b>
1600-1620	<u>Effects of El Niño-Southern Oscillation on Fire Regime Changed Over Time in Northeastern Mexico</u>	Larissa L. Yocom
1625-1645	<u>Fire Regime Changes in the Western Mediterranean Basin: From Fuel-limited to Climate-limited Fire Regime</u>	Juli G. Pausas
1650-1710	<u>Fires of the Past: Local to Global Perspectives on Biomass Burning Since the Last Glacial Maximum</u>	Mitchell J. Power
1715-1735	<u>Climate and Fire History in Mongolia</u>	Peter M. Brown
1740-1800	<u>Continental to Global-Scale Fire History from Tree-Rings: Progress and Prospects</u>	Thomas W. Swetnam

<b>Reducing large tree mortality from fire in long-unburned forests</b>		<b>Savannah E</b>
1600-1620	<u>Beetles, Resin, and Post-fire Ponderosa Pine Mortality: Searching for Causal Mechanisms</u>	Daniel D.B. Perrakis
1625-1645	<u>Alternative Duff Treatments for Minimizing Old Ponderosa Pine and Western Larch in Moist Forests of Idaho and Northwest Montana</u>	Theresa B. Jain
1650-1710	<u>The Northern Arizona Prescribed Fire Raking Study at Four Years Postfire: Not All Trees Need it</u>	Carolyn Hull Sieg
1715-1735	<u>Effects of Raking Large Diameter Ponderosa and Jeffrey Pines Before Burning to Reduce Tree Mortality</u>	Sharon Hood
1740-1800	<u>Panel Discussion</u>	
<b>Suppression Effects, Community Interaction and Decision Making</b>		<b>Oglethorpe A &amp; B</b>
1600-1620	<u>A Holistic Framework to Sustainably Manage the Wildland-Urban Interface</u>	Christopher A. Dicus
1625-1645	<u>Integration of Weather Data and the Spatial Allocation of Market and Nonmarket Values in Fire Management</u>	Armando González-Cabán
1650-1710	<u>Fire Program Analysis: A Comprehensive Planning Framework for Managing Wildland Fire on Federal Lands in the United States</u>	Danny C. Lee
1715-1735	talk was cancelled	
1740-1800	<u>Fuel Treatment Effects in Dry Forests of the Western United States: Testing the Principles of a Fire-safe Forest</u>	Morris C. Johnson
<b>Grassland Fire</b>		<b>Plaza</b>
1600-1620	<u>Northern Bobwhite Habitat Response to the East Amarillo Complex Wildfires</u>	Thomas Warren
1625-1645	<u>Blue Grama and Purple Threeawn Response to Summer and Winter Prescribed Fire</u>	Grant E. Sorensen
1650-1710	<u>Pyric Herbivory: Determining the strength of the fire-grazing interaction</u>	Samuel D. Fuhlendorf
1715-1735	<u>Pyric Herbivory - Fine Scale Mechanisms and Effects</u>	Brady W. Allred
<b>Landscape Level: Fire Regimes &amp; Fire Effects</b>		<b>Academy</b>
1600-1620	<u>Varying Constraints on Global Fire Activity</u>	Meg A. Krawchuk
1625-1645	<u>The Impact of Variable Fire Return Intervals on the Structure of Southeastern Pine Forest based on Small Footprint LiDAR</u>	Claudia M.C.S. Listopad
1650-1710	<u>Post-fire Fuel Dynamics and Future Fire Severity in Dry-mixed Conifer Forests of Oregon's Cascades</u>	Christopher J. Dunn
<b>Role of Technology</b>		<b>Pulaski</b>
1600-1620	<u>Assembling the Pieces; Compiling Databases to Create a Fire Fuels Database for the Southeast Region of the National Park Service.</u>	Justin M. Shedd
1625-1645	<u>Associating and Integrating Fire Information Streams: The SMARTFIRE System</u>	Sean Raffuse
1650-1710	<u>Use of GIS, GPS and Remote Sensing in Wildland Fire Decision Making</u>	Leisyka Parrott & Jennifer Adams