

# FUELS OF TODAY - FIRE BEHAVIOR OF TOMORROW

6th International Fire Behavior and Fuels Conference

Hyatt Regency Albuquerque, New Mexico

April 29 - May 3, 2019

**Monday, April 29, 2019**

8:00 - 9:00	Workshop Registration			
<b>EDUCATIONAL WORKSHOPS &amp; TRAINING</b>				
	<b>Location</b>	<b>Workshop</b>		
9:00 - 6:00	<b>Fiesta 1-4</b>	Soil Moisture and Wildfire Prediction Workshop		
11:00 - 1:00	<b>Enchantment A/B</b>	Wildfire Storm Survival - Instructor Troop Emonds		
2:00 - 6:00	<b>Enchantment A/B</b>	Operational Incident Support with Wildfire Analyst and fiResponse Instructors Joaquin Ramirez and David Jones		
2:00 - 6:00	<b>Enchantment C/D</b>	Learning the Photoload Sampling Technique: Visually estimating surface fuel loadings from photographs for research and management applications Instructors Robert E Keane, Rachel Loehman and Duncan Lutes		
2:00 - 6:00	<b>Enchantment E/F</b>	Fire and Fuels Management Tools Instructors Susan Prichard, Roger Ottmar and James Cronan		
12:00 - 6:00	<b>Conference Registration/Information Desk Open</b>			
1:00 - 2:00	<b>Lunch - on your own</b>			
2:00 - 6:00	<b>Early Exhibitor Set-up Grand Pavilion I-III</b>			
6:00 pm	<b>Pre-Conference Gathering - JC's New York Pizza Department &amp; Back Alley Draft House</b>			
<b>Tuesday, April 30, 2019</b>				
7:00 - 5:30	<b>Conference Registration/Information Desk Open</b>			
7:00 - 9:00	<b>Exhibitor Set-up Grand Pavilion I-III</b>			
7:15 - 7:45	<b>Greet the Day Yoga/Stretching - Led by Johnny Stowe, Boardroom East</b>			
	<b>Pavilion Grand IV-V</b>			
8:00 - 9:50	<b>WELCOME AND OPENING REMARKS</b> Tom Zimmerman, Conference Chair and IAWF Immediate Past President Laura McCarthy, State Forester, New Mexico <b>KEYNOTE PRESENTATION</b> Arthur "Butch" Blazer, President, Mescalero Apache Tribe			
9:50 - 10:20	<b>Networking Break with Exhibitors - Grand Pavilion I-III</b>			
	<b>CONCURRENT SESSIONS</b>			
	<b>Fiesta I-IV</b>	<b>Enchantment A/B</b>	<b>Enchantment C/D</b>	<b>Enchantment E/F</b>
	<b>Smoke</b>	<b>Deep Dive: Emerging Technologies Used to Inform Fire Management</b>	<b>Management Decisions</b>	<b>Fire Behavior</b>
	<b>Moderator: Julie Hunter</b>	<b>Moderator: Tami Parkinson</b>	<b>Moderator: Kara Yedinak</b>	<b>Moderator: Kathryn Butler</b>
10:20 - 10:40	AI-based early wildfire smoke detection and suppression using optical sensors Azarm Nowzad	The Evaporative Demand Drought Index: Research, Tools, and Applications for Wildland Fire Management Dan McEvoy	A Changing Fire Environment – Is Fire Program Development Matching Complexity? Tom Zimmerman/Joe Stutler	A reduced fire-physics fire behavior model: Development and evaluation William Mell
10:40 - 11:00	Improving Spatial Resolution of Wildland Fire Location and Fuel Biomass Data Inputs to NOAA's NAQFC Nathan Pavlovic	Applying Antecedent Land Surface Conditions and Machine Learning to Wildfire Events and Seasonal Burn Prediction Jonathan L. Case	Structure Loss to Wildfires - Its Effect On Suppression and Community Recovery David Shew	Understanding the Dynamics of Inclined Flames in Wildland Fires Evan Sluder
11:00 - 11:20	Predicting PM Emissions with FIRETEC Simulations Alexander Josephson	Use of GOES 16/17 in Wildland Fire T. Todd Lindley	Looking For New Ways to Approach Lessons from the Past: Revisiting After Action Reports Tamara Wall	The Colorado Fire Prediction System (CO-FPS) and how it incorporates fuel moisture in simulations Jason C. Knievel

11:20 - 11:40	Modeling of smoke impacts on air quality using direct observation of hourly fire activity from geostationary satellites Nathan Pavlovic	Small UAS use in wildland fire research and management Adam C. Watts	Identifying Indigenous Burning Practices and Patterns using Historical Photographs Rick Arthur	Advancing fuel loading estimates for next-generation mapping, regional smoke management, emissions inventories and air-quality models Nancy French
11:40 - 12:00	Development of a compact, portable smoke emissions sampling instrument appropriate for use with small Unmanned Aircraft Systems Jayne Boehmler	Next Generation Wildfire Intelligence Cyberinfrastructure through Data and Artificial Intelligence Jessica Block  <b>Discussion to Follow</b>	Understanding fire spread in wildland urban interface communities Fernando Jose Szasdi Bardales	Flammability of American Pines Morgan Varner
12:15 - 1:30	<b>Awards Luncheon - Grand Pavilion VI (Lunch Provided and All Invited!)</b>			
1:00 - 1:15	<b>Work the Kinks Out Yoga/Stretching - Led by Johnny Stowe, Boardroom East</b>			
	<b>CONCURRENT SESSIONS</b>			
	<b>Fiesta I-IV</b>	<b>Enchantment A/B</b>	<b>Enchantment C/D</b>	<b>Enchantment E/F</b>
	<b>Smoke</b>	<b>Risk Management</b>	<b>Fire Behavior</b>	<b>Fire Effects</b>
	<b>Moderator: Nancy French</b>	<b>Moderator: Bob Keane</b>	<b>Moderator: Kurtis Nelson</b>	<b>Moderator: Cabe Speary</b>
1:30 - 1:50	Increases in PM <sub>2.5</sub> emissions from wildfires in continental United States under climate change Yongqiang Liu	An evaluation of alternative weather inputs on fire risk simulations in southern California Alex Dye	Understanding Fire Behavior Mechanics in a Complex Landscape: Simulating Wildfires in Northeastern Minnesota Jacob Olbrich	Geographic patterns of fire severity following an extreme Eucalyptus forest fire in Southern Australia: 2013 Forcett-Dunalley fire Mercy Ndalila
1:50 - 2:10	Micrometeorology and turbulence structures observed in a grass fire plume Maritza Arreola Amaya	Quantifying Community Risk to Wildfires Akshat Chalahwat	Appropriate Analysis of Wildland Fuel Composition David Weise	Effects of fire intensity and abiotic factors on persistence of an encroaching woody species Heath Starns
2:10 - 2:30	CALIOP-based Biomass Burning Smoke Plume Height Amber Soja	Wildfire risk assessment and fuel treatment prioritization at Yosemite National Park, USA Dave Schmidt	Modeling the Wind Disturbances on Fires Near a Slope Tom Fletcher	Mechanisms of Bark Beetle-Caused Mortality Following Variable Density Thinning and Prescribed Fire Treatments in a Central Sierra Mixed-Conifer Forest Alexis Bernal
2:30 - 2:50	Using GOES-16 to construct hourly time profiles of fire emissions for wildfires in Northern California Susan O'Neill	Modeling and mapping fire risk from human factors in Mexico Daniel Jose Vega-Nieva	Dynamism of bark roughness as a possible factor in firebrand production Michael Gallagher	Carrying capacity of fire-prone landscapes: lessons from the Reburn project for carbon and wildlife habitat dynamics Susan Prichard
2:50 - 3:10	A new way to analyze the composition of materials – application to wildland fire gases David Weise	International and US Lessons on Engaging Local Officials for Wildfire Risk Reduction Lucian Deaton	New Zealand Prescribed Fire Experiments to Test Convective Heat Transfer in Wildland Fires Sara McAllister	Fire-scar compartmentalization and bark-thickness as proxies of fire regimes in two tropical montane coniferous forests Jesus Sáenz-Ceja
3:10-3:50	<b>Networking Break with Exhibitors - Grand Pavilion I-III</b>			

Grand Pavilion IV-V				
3:50 - 4:00	Introductions			
4:00 - 4:45	<p align="center"><b>KEYNOTE PRESENTATION - Live streamed to Sydney</b>  <b>The Quest for Wildfire-informed Fuel Management Design – Some Insights from the Boreal</b>  <b>Jen Beverly, Assistant Professor (Wildland Fire)</b>  <b>Agricultural Life and Environmental Sciences Renewable Resources, University of Alberta</b></p>			
4:45 - 5:30	<p align="center"><b>KEYNOTE PRESENTATION - Live streamed from Sydney</b>  <b>Savanna Fire Ecology, Management and the Carbon Market</b>  <b>Jeremy Russell - Smith, Professor of Fire Ecology, Charles Darwin University, Darwin</b></p>			
Grand Pavilion I-III				
5:30 - 7:30	Poster Session/Exhibitor Social Reception			
P r e s e n t a t i o n s	The effects of environmental and fire conditions on carbon monoxide exposure levels of wildland firefighters Scott Henn	Comparisons of LiDAR- and field-derived estimates of canopy bulk density in ponderosa pine forests in northern Arizona Caden Chamberlain	Exploring the Impacts of Fuel, Weather and Topography on Wildfire Behaviour during the Horse River Wildfire near Fort McMurray, Alberta Ginny Marshall	
	Fire Has a Role Sadie Runge	Masticated (Mulched) Fuels and Fire Behaviour in Canada's Boreal Forest Environments Steven Hvenegaard	2017 Northern California Wildfires – A NASA Health and Air Quality Applied Sciences Team (HAQAST) Tiger Team Susan O'Neill	
	Missing Link: soil moisture-fuel moisture interaction Katya Rakhmatulina	Comparison of mammalian and avian species richness at burned and unburned camera trap stations following the 2015	Integrating multi-temporal LiDAR and Landsat for burn severity mapping Colton Miller	
	The ecological effects of bark beetles, wildfires, and their interactions in Rocky Mountain subalpine forests Zoe Schapira	Fuels, fire behavior, and fire effects monitoring on active wildfires Matthew Dickinson	Monitoring changes in atmospheric pressure and turbulence at prescribed burns of different intensities John Hom	
	Fuel and Fire Risk: Assessing Riverside and Mount Spokane State Parks for Potential Wildfire in Washington Dana Chapman	Impact of the traditional use of prescribed burning in the carbon stock of the chestnut forests of Central Spain Blanca Cespedes	An overview of experiments on fire line merging at different scales and orientations Nadia Mofidi	
	Modeling Southern California Chamise Live Fuel Moisture on a Grid Scott Capps	USGS Fire Danger Forecast Products Kurtis Nelson	The Fire Environment NWCG Fire Behavior Subcommittee	Fuel Beds in the Monarch Butterfly Reserve, Mexico Diego Rafael Perez-Salicrup
Wednesday, May 1, 2019				
8:30 - 5:00	Conference Registration/Information Desk Open			
6:45 - 8:15	Breakfast on the Plaza - Outside on Civic Plaza			
6:45 - 8:15	Fun Run/Walk - Outside on Civic Plaza			
6:45 - 7:45	Greet the Day Yoga/Stretching - Led by Johnny Stowe, Outside on Civic Plaza			
Grand Pavilion IV-V				
8:30 - 9:30	<p align="center"><b>WELCOME BACK AND ANNOUNCEMENTS</b>  <b>Tom Zimmerman</b>  <b>KEYNOTE PRESENTATION</b>  <b>Alaska's Fire Environment; Not an average place...</b>  <b>Robert H. Ziel, Fire Analyst, Alaska Fire Science Consortium, University of Alaska Fairbanks</b></p>			
9:30 - 10:00	Networking Break with Exhibitors - Grand Pavilion I-III			

	CONCURRENT SESSIONS			
	Fiesta I-IV	Enchantment A/B	Enchantment C/D	Enchantment E/F
	Smoke	Fire Behavior/Fuels Treatment	<b>DEEP DIVE</b> Measuring and Modeling Pyrolysis in Longleaf Pine Fuel Beds to Improve Fire Behavior Models	Fire Effects
	Moderator: Lucian Deaton	Moderator: Tom Zimmerman	Moderator: David Weise	Moderator: Susan Prichard
9:55 - 10:00			Introduction: David Weise	
10:00 - 10:20	A Dispersion Model Assessment of the Ventilation Index in southwestern Colorado Michael Kiefer	Multi-criteria model selection for wildfire decision-making Harry Podschwit	Kinetic study of slow pyrolysis of live and dead wildland fuels Elham Amini	Invasive Grasses: A New Perfect Storm for Forested Ecosystems? Becky Kerns
10:20 - 10:40	The interaction of moisture content, ventilation, and fuel bed structure on the burning rate Sara McAllister	Mountain Pine Beetle Infestation and Wildfire, the British Columbia Experience Dana Hicks	Infrared spectroscopy for detection of gas-phase pyrolysis species: detection of naphthalene, methyl nitrite, allene, acrolein and acetaldehyde Tanya L. Myers	Rethinking our wildland fire management focus on forested lands Michele Crist
10:40 - 11:00	Critical Conditions for Ignition of Structural Materials by Piles of Smoldering Firebrands Hamed Salehizadeh	Fuels mapping in heterogeneous forests: comparison of interpolation methods and consequences for fire behavior prediction Justin Ziegler	Sampling SE vegetation pyrolysis products in canisters from field and wind tunnel fire experiments and analysis by GC/FID and GC /MS Steve Baker	Under Pressure: Uncovering the mechanisms in fire induced ruptures of live needles Kara Yedinak
11:00 - 11:20	Turbulence statistics and sensible heat fluxes associated with head fire and flank fires Melissa Gonzalez-Fuentes	Impact of fuel treatments on fire behaviour in boreal forest stands: a factorial study using FIRETEC Dan Thompson	Pyrolysis products emitted by prescribed fires in longleaf pine forests in the southeastern United States Catherine Banach	The effects of fire return interval on the aboveground biomass and flowering of wiregrass in the southeastern USA Timothy Shearman
11:20 - 11:40	Automated real-time ensemble fire forecasting in California Chris Lautenberger	Funding fuel treatments: Quantifying ecosystem service benefits derived from fuel treatments Thomas Buchholz	Heats for evaporation, capacity, and combustion of fresh leaves and their relationships to leaf composition and moisture content Mark Dietenberger	Mesophyte impacts on forest floor moisture and litter flammability in fire-excluded pyrophytic oak-hickory woodlands Jesse Kreye
11:40 - 12:00	Exploring the Vertical Distribution of Wildland Fire Smoke in CMAQ Joseph Wilkins	Discussion	Pre- and post-fire characterization of fuels at prescribed burns in longleaf pine stands in the southeastern United States Joseph Restaino	Managing the Complexities and Consequences of Peat Fires Around Communities Mark Gunning
12:00 - 1:30	Lunch - Provided - Grand Pavilion VI			

	CONCURRENT SESSIONS			
	Fiesta I-IV	Enchantment A/B	Enchantment C/D	Enchantment E/F
	<b>Atmospheric Assessments</b>	<b>Fuels Treatment</b>	<b>DEEP DIVE Measuring and Modeling Pyrolysis in Longleaf Pine Fuel Beds to Improve Fire Behavior Models</b>	<b>Vegetation Analysis</b>
	<b>Moderator: Nathan Pavlovic</b>	<b>Moderator: Tamara Wall</b>	<b>Moderator: David Weise</b>	<b>Moderator: Hugh Scanlon</b>
1:30 - 1:50	Examining weather factors associated with the largest of the large fires Brian Potter	Before, During and After the Fire. Preparing Youth Camps for Wildland Fire in 2019 Michael Jensen	Drone aerial photography to assess change in biomass Jonathan Batchelor	Effects of Douglas-fir encroachment and removal on live and dead fuel moisture in a northwestern California oak woodland Jeffrey Kane
1:50 - 2:10	Sweep-Ejection Dynamics for Momentum and Heat Fluxes During Wildland Fires in Forested Environments Warren Heilman	Aerial Firefighting: Ground pattern formation from a vortex dynamics perspective. Saad Qureshi	Fire monitoring using 3D data from drone based PhoDAR and Terrestrial Laser Scanner Akira Kato	Repeated fire sets trajectory for persistent herbaceous dominance and suppression of woody vegetation in basin big sagebrush ecosystems Lisa Ellsworth
2:10 - 2:30	Use of a High-Resolution Atmospheric Model for Pre-Burn Instrumentation Deployment Guidance Michael Kiefer	MASTIDON-a monster of a mastication study Robert Keane	Application of Background Oriented Schlieren to flow visualization in live vegetative fuel beds Amirhessam Aminfar	Quantifying resiliency in dry forests of the American West John Bailey
2:30 - 2:50	Supporting fire weather forecasting through a tool to identify convective outflows in numerical weather prediction models James Bresch	Mitigating wildfire hazard in black spruce (Picea mariana) dominated boreal forests Dave Schroeder	Analytical kinetics solutions with derived parameters for moisture desorption, pyrolysis, and char combustion for fresh leaves relative to compositions and moisture content Mark Dietenberger	Characterizing forest fuels using LiDAR data Hilary Cameron
2:50 - 3:10	Evaluating forecasts of the Hot-Dry-Windy Index with GOES-16 data Brian Potter/Amy Marsha	Masticated (Mulched) Fuels and Fire Behaviour in Canada's Boreal Forest Environments Steven Hvenegaard	Physics based modeling of moisture evaporation in living leaves P. Rahimi Borujerdi	Developing a Near Real Time Monitoring System for Post Fire Vegetation Recovery for the Sierra Nevada, CA Jason Moghaddas
3:10 - 3:30	Fire smoke exposure and health impact assessment of the 2018 large wildfires in California Yufei Zou	Fuel Management research in Western Canada - FPInnovations contributions to a complex science Chad Gardeski	Numerical Modeling of Fire Spread across pine needle fuel beds Masoud Ghasemian	Noise to Signal: Quantifying characteristics of acoustic impulse events from mature live needles Kara Yedinak
3:30 - 4:00	<b>Networking Break with Exhibitors - Grand Pavilion I-III</b>			
	<b>Grand Pavilion IV-V</b>			
4:00 - 6:00	<b>JOINT PANEL SESSION WITH Sydney - Live streamed</b> <b>What Happens When Women Thrive – A Life and a Career in Fire</b> <b>Moderators: Tamara Wall, Desert Research Institute, Tami Parkinson, US Forest Service &amp; Bronnie Mackintosh</b>  <b>Panelists (ABQ)</b> <b>Annie Benoit, NWCG Training Specialist</b> <b>Maria Sharpe, RPF MSc, Fire Science and Information Manager, Canadian Interagency Forest Fire Centre</b> <b>Michelle Walker, Deputy State Director-Support Services, BLM Idaho State Office</b> <b>Deanne Shulman, Retired Forest Service</b>			
6:35	<b>Afterhours - Isotopes Baseball Game (games starts at 6:35 pm)</b>			
6:30 - 7:30	<b>Sahyinidra Fire Meditation - Led by Johnny Stowe, Boardroom East</b>			

Thursday, May 2, 2019

7:30 - 5:00	Conference Registration/Information Desk Open			
7:15 - 7:45	Greet the Day Yoga/Stretching - Led by Johnny Stowe, Boardroom East			
Grand Pavilion IV-V				
8:00 - 8:45	<b>KEYNOTE PRESENTATION - Live Streamed from Marseille</b> <b>Extreme Wildfires Events: An Escalating Worldwide Problem</b> <b>Fantina Tedim, Assistant Professor at the Department of Geography, Faculty of Arts, University of Porto, Portugal</b> <b>University Fellow at Charles Darwin University, Australia</b>			
8:45 - 9:30	<b>KEYNOTE PRESENTATION - Live Streamed to Marseille</b> <b>Is this Our New Normal?</b> <b>Gwen Sanchez, US Forest Service, Acting Forest Supervisor, Modoc National Forest, Northern California</b>			
9:30 - 10:00	Networking Break with Exhibitors - Grand Pavilion I-III			
CONCURRENT SESSIONS				
	<b>Fiesta I-IV</b>	<b>Enchantment A/B</b>	<b>Enchantment C/D</b>	<b>Enchantment E/F</b>
	<b>Fire Weather</b>	<b>Deep Dive</b>	<b>Fire Behavior</b>	<b>Fire Environments in Transition</b>
	<b>Moderator: Joseph Wilkins</b>	<b>Moderator: Theresa Jain</b>	<b>Moderator: Sara McAllister</b>	<b>Moderator: Brian Potter</b>
10:00 - 10:20	Fire Weather Index Performance on Large Wildfire Events in California Heather Kane	Lessons from inventory analysis of fire resistance-promoting forest treatments: assessing needs, effectiveness, economic feasibility, and carbon implications	Examining sensitivity of modeled fire behavior to small perturbations in initial conditions Alex Jonko	Fuel Beds in the Monarch Butterfly Reserve, Mexico Diego Rafael Perez-Salicrup <b>MOVED TO POSTER</b>
10:20 - 10:40	Fire Danger and Fire Weather Indices in the Santa Cruz Mountains, California Liliana Chicas		Meteorological Conditions associated with the Camp Fire Extreme Fire Behavior Matthew Brewer	Fire Has a Role Cheyenne Warner
10:40 - 11:00	An Overview of the Storm Prediction Center Fire Weather Program and Future Plans Matthew Elliott	The <b>first chapter</b> will cover, in depth, the process and methods we used to address fire resistance and treatment longevity.	Coupled fire-atmosphere interactions controlling the combined influences of wind and slope on fire behavior Rod Linn	Understanding the Fire Hazards from Fences, Mulch and Woodpiles Kathryn Butler
11:00 - 11:20	Mapping extreme fire weather and its impact on firefighter safety W. Matt Jolly	The <b>second chapter</b> focuses on the results from the east region: Montana and Idaho, including all treatable forests regardless of ownership.	Physical and Chemical Parameters Controlling Firebrand Production David Blunck	Community in transition: Post-fire community dynamics following Colorado wildfires Camille Stevens-Rumann
11:20 - 11:40	<u>Emerging Matters</u> <u>11:20-11:25</u> Grassland Biomass Estimation During the Dormant Season: Getting Good Data With Less Effort Carolyn Baldwin	The <b>third chapter</b> focuses on results from the central region: central/eastern Washington and Oregon plus California's Sierra Nevada.	Realtime.Earth: Live Photogrammetry of Fuels and Fire Behavior Using Mobile Phone Browsers Stephen Guerin	<u>Deep Dive (40 minutes)</u> Lessons Learned from the 2017 California Wildfires Daniel Gorham
11:40 - 12:00	<u>Emerging Matters</u> <u>11:30-11:35</u> Expanding Fuels and Fire Landscapes in a Changing World Amber Soja	The <b>fourth chapter</b> focuses on the west region: the western cascades of Oregon and Washington and the Klamath and western parts of California.	Trend of increasing nighttime temperature and its relation to fire behavior Timothy Brown	
12:00 - 1:30	Lunch - Provided - Grand Pavilion VI			
1:00 - 1:15	Work the Kinks Out Stretching - Led by Johnny Stowe, Boardroom East			

	CONCURRENT SESSIONS			
	Fiesta I-IV	Enchantment A/B	Enchantment C/D	Enchantment E/F
	Fuels Treatment	Rx Fire	Fire Danger Rating and Fire Behavior	Fuels and Fire Behavior in SW US and Mexico
	Moderator: Cheyenne Warner	Moderator: Gene Rogers	Moderator: Morgan Varner	Moderator: Lily Konantz
1:30 - 1:50	Assessing fire behavior and effects following restoration in aspen dominated forests in Lake Tahoe Basin Chad Hoffman	Intermediate-scale fire behavior measurements in the field: Bridging the gap between laboratory experiments and management-scale prescribed fires. Kenneth Clark	Use of a physics-based fire model to evaluate the influence of tree separation distance and group size on crown fire initiation and group torching behavior Scott Ritter	Mapping fuel loads and fire behaviour from Sentinel in Durango, NW Mexico Daniel Jose Vega-Nieva
1:50 - 2:10	Restoration of ponderosa pine forest structure: It's not just about density Mike Battaglia	Leading from behind: the role of agency fire managers in enabling widespread change for using prescribed fire Hugh Scanlon	Fire Spread Upslope: Numerical Simulation of Laboratory Experiments Xareni Sánchez-Monroy	The Forest Fire Danger Prediction System of Mexico Daniel Jose Vega-Nieva
2:10 - 2:30	Effects of landscape-scale treatment extent and prioritization scheme on annual area burned and risk homes and other assets Joe Scott	Does the range of variability in prescribed burning affect forest understory composition in longleaf pine flatwoods James Cronan	Quantifying skill of significant fire potential outlooks in the Northwestern U.S. Joshua Clark	Temporal Controls on Treatment Longevity in Lower Montane Forests of the Central Rocky Mountains Wade Tinkham
2:30 - 2:50	Risk Perception and Mitigating Behavior: An Analysis of Wildfire Risk Mitigating Behavior Hari Katuwal	Multi-scale approach to fuel reduction in a fragmented landscape in eastern Oregon Craig Bienz	Inferring energy incident on sensors in low-intensity surface fires from remotely-sensed radiation and using it to predict tree stem injury Matthew Dickinson	Development of wildland fuel beds and fire potential maps as tools for fire management planning in Mexico Enrique J. Jardel-Pelaez
2:50 - 3:10	Effects of Biomass Harvest on Restoration Treatment Outcomes in the Southwest - Fuels and Fire Behavior Graham Worley-Hood	Next-Generation Fire Model Addresses Managers' "Burning Questions" - A Case for Co-Production James Furman	Seasonal variations in live fuel chemistry, kinetics and fire behavior W. Matt Jolly	Landscape-scale collective action before and after the "big-one" in New Mexico Collin Haffey
3:10 - 3:30	Emerging Matters (5 min) LiDAR as a tool for assessing hazard fuel reduction projects Julia Olszewski	Discussion	Estimation of Fuel Moisture Content Based on MODIS Satellite Observations Using Machine Learning Branko Kosovic	Discussion
3:30 - 4:00	<b>Networking Break with Exhibitors - Grand Pavilion I-III</b>			
	<b>Grand Pavilion IV-V</b>			
4:00 - 5:00	<b>KEYNOTE CLOSING PRESENTATION</b> Clint Cross, Applied Fire Ecologist, Fire and Aviation Management, USDA Forest Service, Washington, D.C.			
	<b>Friday and Saturday, May 3 - 4, 2019</b>			
Fri 830-530	<b>Field Trip - Santa Fe National Forest</b>			
Fri 8 - Sat 12	<b>Field Trip - Gila National Forest, Black Range Ranger District (Overnight Trip)</b>			