International Association of Wildland Fire

Rethinking the Global Wildfire Problem: Are we Focusing on the Right Problems and Right Solutions?

15th International Wildland Fire Safety Summit & 5th Human Dimensions of Wildland Fire Conference Renaissance Hotel Asheville, North Carolina - December 10-14, 2018

PROGRAM SCHEDULE	(November 29, 2018)
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		Monday, Decembe	r 10		
8:00 - 6:00		Registration			
	Swannanoa	Vict	oria	Alexander	
		Educational and Tr	aining Workshops		
9:00-11:00		2. 12 O'Clock High Leadership: Lessons from the Cockpits of the Greatest		3. Courage to Be Safe® in the Wildland Richard Best, Everyone Goes Home®	
11:00-1:00	Revaluation Methods in Fire Management: A Crash Course Eric Kennedy, Asst Professor, Disaster and Emergency Management, York University	Generation to John Tippett, Dire Programs, Nationa Found	ector, Fire Service	Advocate Program Manager for the National Fallen Firefighters Foundation	
1:00-2:00	Lunch - on your own				
	Swannanoa			Victoria	
2:00 -4:00	4. Suicide Prevention within the Fire Service: Thinking Critically and Taking Action Mary VanHaute, Coordinator/Trainer St. Petersburg College Center for Public Safety Innovation		Mark Sm	5. Luck Runs Out Mark Smith, Mission-Centered Solutions	
4:00-6:00	6. Training That Makes a Difference F Richard "Rick" Mason, Training & Educa National Fallen Firefighters Fou	& Education Coordinator,			
6:00		Pre-Conferer	_		
		Renaissance Ashevi	-		
		Tuesday, Decembe			
7:00-10:00 am	Exhibitor Set up (Grand Ballroom Salon A/B)				
7:30- 5:30	Registration Desk Open				
	Grand Ballroom Salon C				
	OPEI	NING REMARKS/WELC	OME AND IAWF AWA	ARDS	
8:30-9:00	Conference Co-Chairs Toddi Steelman, IAWF Vice President, Stanback Dean of the Nicholas School of the Environment at Duke University and Sarah McCaffrey, Research Forester, USDA Forest Service			•	
	The Ri	ise of the Phoenix: Ge	nder Equity in Wildla	nd Fire	
	Dr Christine Eriksen, Australian Centre for Culture, Environment, Society and Space, School of Geography and Sustainable Communities, University of Wollongong, Australia				
9:00-10:30	Gender, Race and Cultural Perspectives: Developing New Approaches to Being with Fire This panel will explore how/why inclusion of more diverse perspectives on fire, whether due to gender or race or cultural background is critical for developing new perspectives of the problem and new approaches that will lead to better outcomes. Featuring: Dr Christine Eriksen, University of Wollongong, Australia Mary Huffman, Indigenous Peoples Burning Network and Fire Science Don Hankins, California State University, Chico Department of Geography and Planning				
10:30-11:00	NETWORKING BREAK with Exhibitors (Grand Ballroom Salon A/B)				
	CONCURRENT SESSIONS (rooms on the 2nd level)				
	Swannanoa	Vict	•	Alexander	
	Moderator: Matthew P. Thompson		Tony Jarrett	Moderator: Travis Paveligio	
	Firefighter Decision Making	Community	•	WUI	
11:00-11:20	Managing Teams More Effectively During Large-Scale Emergencies Chris Bearman	Identifying barriers management in the interface: communit	to proactive wildfire ne wildland urban ry perspectives from nbia, Canada	Exposure of Human Communities to Wildfire in Oregon and Washington, USA Joe H. Scott	

11:20-11:40	When Risk Becomes Routine: An Introduction to Individual Risk Desensitization Elliot Nauert	The Impact of Different Measures of Homeowner Wildfire Preparedness Claire Rapp	Managing Wildfire Risk, Precipitation, and Transportation Infrastructure Andrew Fraser
11:40-12:00	Rethinking Mop-Up "Standards:" Challenges With Implementing New Approaches Riva Duncan	Assessing Public Health Interventions for Wildland Fire Smoke: Summary of Evidence Stasia Widerynski	Why Does Structure Loss to Wildfires Continue to Rise Despite Increasing Prevention Actions? David Shew
12:00-12:20	Design, Implementation and Evaluation Process of an Integrated Education Intervention to Address Psychosocial Risk Factors Across a Wildland Fire Season Caleb Leduc	Themes and Patterns in the Media's Coverage of Wildfires in the United States, Canada, and Australia: 1986 – 2016 Sarah McCaffrey	Southern Appalachian Large Wildfire Risks and the Evolving Non-resident Wildland Interface Steven P Norman
12:20-12:40	Cognitive Factors Influencing Human Decision Making for Wildland Fire Suppression Van V. Miller	Risk Communication: A summy of Lessons Learned in the Southwest and Northern Rockies Jayson Coil	Smoke and Transportation Safety: New Concepts and Tools to Predict Reduced Roadway Visibility Gary Curcio
12:40-12:50	Red Flag Warnings—do they adequately warn the public or support resource management Tim Brown	Moving From the Why to the How for Implementing Modified Wildfire Management Strategies Stephen D. Fillmore	Anthropogenic Fire Regimes in the Blue Ridge Mountains Cynthia Fowler
12:50-2:10		Lunch (on your own)	
	CONCURRENT SESSIONS (rooms on the 2nd level)		
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	Swannanoa	Victoria	Alexander
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2:10 - 2:30	Swannanoa Moderator: Kelsy Gibos	Victoria Moderator: Sarah McCaffrey	Alexander Moderator: Toddi Steelman
2:10 - 2:30 2:30 - 2:50	Swannanoa Moderator: Kelsy Gibos Firefighter Safety How fast can you get to the safety zone? Crowdsourcing fitness tracker data to improve travel rate estimates	Victoria Moderator: Sarah McCaffrey Community Evacuation Exploring Resident Understandings of the Three-Tier Evacuation Warning System for Wildfire in Central Idaho	Alexander Moderator: Toddi Steelman Co-Management Evaluating the influence of local social context on the design of "pathways" for achieving Fire Adapted Communities
	Swannanoa Moderator: Kelsy Gibos Firefighter Safety How fast can you get to the safety zone? Crowdsourcing fitness tracker data to improve travel rate estimates Michael J. Campbell Applied In-Depth Leadership and Human Factors Research to Reduce Wildland Fire Fatalities Fred J. Schoeffler and Thomas Taylor	Victoria Moderator: Sarah McCaffrey Community Evacuation Exploring Resident Understandings of the Three-Tier Evacuation Warning System for Wildfire in Central Idaho Catrin Edgeley Approach to Using Human Behaviour in Fire to Inform WUI Community Evacuations	Alexander Moderator: Toddi Steelman Co-Management Evaluating the influence of local social context on the design of "pathways" for achieving Fire Adapted Communities Travis Paveglio Co-Managing for Complexity: New Tools Emerging from Complex Interjurisdictional Wildfires in 2017 and 2018 Toddi Steelman, Anne-Lise Velez, Branda Nowell, Ryan Scott, Daisy Mills and Honey Minkowicz
2:30 - 2:50	Swannanoa Moderator: Kelsy Gibos Firefighter Safety How fast can you get to the safety zone? Crowdsourcing fitness tracker data to improve travel rate estimates Michael J. Campbell Applied In-Depth Leadership and Human Factors Research to Reduce Wildland Fire Fatalities Fred J. Schoeffler and Thomas Taylor Diversity, Inclusion and Sector Change – an Australian national perspective Noreen Krusel Towards a Deeper Understanding of Injury Incidence, Mechanism and Type in Ontario Wildland Firefighters over a Five-Year Period, 2011-2015 Caleb Leduc	Victoria Moderator: Sarah McCaffrey Community Evacuation Exploring Resident Understandings of the Three-Tier Evacuation Warning System for Wildfire in Central Idaho Catrin Edgeley Approach to Using Human Behaviour in Fire to Inform WUI Community Evacuations Lauren Folk Community understandings and responses to bushfire warnings Josh Whittaker	Alexander Moderator: Toddi Steelman Co-Management Evaluating the influence of local social context on the design of "pathways" for achieving Fire Adapted Communities Travis Paveglio Co-Managing for Complexity: New Tools Emerging from Complex Interjurisdictional Wildfires in 2017 and 2018 Toddi Steelman, Anne-Lise Velez, Branda Nowell, Ryan Scott, Daisy Mills and Honey Minkowicz Risk Management Assistance Teams Tim Sexton Discussion

	Deep Dives/Panels			
	Swannanoa	Victoria	Alexander	
	Deep Dive: Why do we still not know how to prevent firefighter entrapments?	Panel Session: Wildfire Preparedness Education at All Ages	Panel Session Cognition, Complexity, and Fire: Governing in the "New Normal"	
4:00-5:30	Presenters Scott Elliott and Kelsy Gibos	Moderator: Tom Welle Presenters:	Network Cognition in Co-Managing Complex Incidents Branda Nowell, Toddi Steelman, Anne-lise	
	We're will not focus on the standard analysis of the fire environment related to	Faith Berry, Tony Jarrett and Lauren Thie	Velez, Kate Albrecht	
	firefighter deaths that tend to be definable instead we hope to pull apart and address some of the human dimensions of entrapment.	Children and youth do not need to be passive bystanders when it comes to wildfire preparation and response. Collaborative work in many countries	Managing Multi-Functional Landscapes at the Interface of Public Forests and Private Land: Exploring the Role of Cognitive Maps at Finding Common Ground among Diverse Stakeholders	
	We are not researchers- just practitioners who probably have the same questions as you we did a bit of digging into the	seeks to infuse wildfire preparedness education in schools to embed practices that will be part of solution to the wildfire	Eric Toman Moneyball for Fire	
	Wildfire Lessons Learned Center's entrapment reports and came up with	problem in the future.	Matt Thompson	
	some interesting observations that we'd like to share.	The Panel will explore innovative practice involving Elementary and High School students in the United States and Australia.	Conceptualizing complexity and trade-offs in a wildfire-prone social-ecological system Matt Hamilton	
5:30-6:30	Social Re	eception with Exhibitors (Grand Ballroom S		
7:00	Documentary Film: The Culture of Fire (75 minutes)			
7:00	Afterhours Networking Packs Tavern			
	Wednesday, December 12			
8:00-12:30		Registration Desk Open		
		Grand Ballroom Salon C		
8:30-10:00	Why Are We Still Missing the Solutions to Keeping Firefighters Safe? International perspectives from researchers and practitioners Featuring: Michael T. DeGrosky, Chief, Fire Protection Bureau, Montana Department of Natural Resources & Conservation Roger Strickland, Senior Instructor, Planned Burn Co-ordinator, Country Fire Authority, Victoria, Australia Scott Elliott, Wildfire Management Training Specialist, Hinton Training Centre, Alberta, Canada José Luis Duce Aragüés, Senior Scientist, Fire Management, Spatial Informatics Group Kelly Close, Battalion Chief, Poudre Fire Authority Christopher Dunn, Research Associate, Department of Forest Engineering, Resources and Management, Oregon State Univer			
		lly Close, Battalion Chief, Poudre Fire Autho	ial Informatics Group rity	
10:00-11:30	Christopher Dunn, Research Associate, De	lly Close, Battalion Chief, Poudre Fire Autho partment of Forest Engineering, Resources NG BREAK with Exhibitors (Grand Ballroon	ial Informatics Group rity and Management, Oregon State University n Salon A/B)	
10:00-11:30	Christopher Dunn, Research Associate, De	lly Close, Battalion Chief, Poudre Fire Autho partment of Forest Engineering, Resources	ial Informatics Group rity and Management, Oregon State University n Salon A/B)	
10:00-11:30	Christopher Dunn, Research Associate, De	Ily Close, Battalion Chief, Poudre Fire Autho partment of Forest Engineering, Resources NG BREAK with Exhibitors (Grand Ballroon POSTER SESSION (Grand Ballroom Salon A/E g geospatial data in Panel Session: App	ial Informatics Group rity and Management, Oregon State University n Salon A/B)	
10:00-11:30	Christopher Dunn, Research Associate, De NETWORKI P Swannanoa Deep Dive: New technologies for accessing	Ily Close, Battalion Chief, Poudre Fire Autho partment of Forest Engineering, Resources NG BREAK with Exhibitors (Grand Ballroom POSTER SESSION (Grand Ballroom Salon A/E g geospatial data in s ribe two activities for ad fire personnel. The the Wildfire Data Feam Awareness Kit eliver and access To part Fire Autho Panel Session: App. The Appalachian R Chattahoochee (G (NC), Blue Ridge (N) River Highlands (V) lessons learned	ial Informatics Group rity and Management, Oregon State University a Salon A/B) Victoria alachian RC&D Fire Adapted Communities	
	Christopher Dunn, Research Associate, Del NETWORKI Swannanoa Deep Dive: New technologies for accessing wildland fire operation. The interactive, hands-on, session will descriptoring access to information by wildland session will include demonstrations of Logistics Network (WildfireDLN) and the Taylor of Carlo of the Carlo of Carlo	Illy Close, Battalion Chief, Poudre Fire Autho partment of Forest Engineering, Resources ING BREAK with Exhibitors (Grand Ballroom POSTER SESSION (Grand Ballroom Salon A/E In geospatial data in series of the Wildfire Data Team Awareness Kit teliver and access the field. In geospatial data in series of the Wildfire Data Team Awareness Kit teliver and access the field. Melissa Patton, Do Jonathan Harts	ial Informatics Group rity and Management, Oregon State University 1 Salon A/B) 3) Victoria alachian RC&D Fire Adapted Communities Coalition C&D FAC Coalition consists of: Chestatee-A), Southwestern (NC), Mountain Valleys NC), Carolina Land & Lakes (NC), and New (A). Join them to hear success stories and about thier partnerships and projects.	

		Thursday, December 13		
8:00 - 5:30	Registration Desk Opens			
	Grand Ballroom Salon C			
	Postfire Impacts and Response - Critical Gaps in the Wildfire Cohesive Strategy In this session the presenters will discuss the rationale to include postfire planning and response in the National Cohesive Strateg provide observations and recommendations for change based on two case study geographies, and provide time for open dialog			
8:30-10:00	with the audience Featuring: Anne Bradley , Director of Forest Conservation, The Nature Conservancy, New Mexico Field Office Alan Lawson, Southeast Region Department of Natural Resources (DNR) Katherine Rowden, Service Hydrologist, National Weather Service / NOAA Annie Schmidt, Director of Policy and Partnerships, Washington State Fire Adapted Communities Learning Network			
10:00 - 10:30	NETWORKI	ING BREAK with Exhibitors (Grand Ballroom	n Salon A/B)	
	СО	NCURRENT SESSIONS (rooms on the 2nd le	vel)	
	Swannanoa	Victoria	Alexander	
	Moderator: Vita Wright	Moderator:	Moderator:	
	Fire Use	Health	Community Recovery	
10:30-10:50	Failure, Innovation, and Capacity Building for Resilient Landscapes and Fire Adapted Communities in New Mexico Eytan Krasilovsky	Noise Exposure Among Wildland Firefighters – Exposure Assessment, Safety and Health Risks George Broyles	Enhancing Local Capacities for Monitoring Forest Fires: Firefighting Brigades as Citizen Scientists H. Leonardo Martínez-Torres	
10:50-11:10	What Limits Use of Fire as a Management Tool on National Forests? Perspectives of Forest Service Line Officers Sarah McCaffrey	Comprehensive Study of Wildland Firefigthers' Health Over Multiple Seasons: Overview and Update Kenneth W. Fent	Community Engagement in (Crisis) Preparation and Recovery – an Australian Perspective Margaret Moreton	
11:10-11:30	Designing Prescribed Burns: A Biocultural Design Case Study from Northwestern Ontario Kurtis Ulrich	Wildland Firefighter Smoke Exposure and Risk of Lung Cancer and Cardiovascular Disease Mortality Kathleen Navarro	What Does Community-led Recovery Look Like? A Case Study from the Carwoola 2017 Bush Fire Zoe D'Arcy	
11:30-11:50	2018 National Prescribed Fire Use Survey Peter Lahm	Understanding Factors Contributing to Wildland Firefighter Health, Safety, and Performance: Assessing Sleep Quanity and Quality on the Fireline Randall Brooks	What the research on human community resilience can teach us about strategies for wildfire safety and education: A review of the literature Marlene Rebori	
11:50-12:10	Increasing safety risk due to fire season shift from spring / fall to summer in Daxing'anling region, China Fengjun Zhao	Wildfire Smoke – Tools and Information People can use Susan M. O'Neill	Capacity Building Approach to Disaster Preparedness. How one community's experience through recovery has informed and influenced a community approach to preparedness Sarah U'Brien	
12:10-1:30	Lunch (on your own)			

		Deep Dives/Panels	
	Swannanoa	Victoria	Alexander
	Panel Session: With Apologies to Dr. Pyne, All Fire Departments Are Not Alike!	Panel Session: Multi-Agency and Community Collaborations: Designing and Utilizing Products, Tools, and Activities to Communicate and Reduce the Risk of Exposure to Wildland Fire Smoke	Deep Dive: Crossing Boundaries of Wildfire Management in the US
1:30-3:30	Join the National Fallen Firefighter Foundation representatives Tom Harbour Rick Best Rick Mason Tricia Sanborn to discuss this relavant and timely topic. Two worlds apart or one world fragmented?	Health Update on health effects of smoke and ORD research - Wayne Cascio New Tools 2019 Wildfire Smoke: Guide for Public Health Officials and related factsheets Susan Lyon Stone CDC Online Tool for Identifying Areas and Populations Vulnerable to Wildfire Surface Smoke Ambarish Vaidyanathan CDC Framework for the Role of Public Health and Wildfires Kathryn Conlon and Kanta Sircar Communities Wildland Fire Air Quality Response Program and new tools - Pete Lahm Proactive work in Missoula MT Sarah Coefield Oregon state-wide, emergency protocol for wildfire smoke - Jamie Bash Smoke-Wise Ashland - Alison Lerch Discussion	The session will be 15 min presentations followed by a world café interaction/set of dialogues. Presenters: Maureen Essen Max Nielsen-Pincus Daniel R. Williams Jesse Abrams Anne-lise Velez
3:30-4:00	NETWORK	NG BREAK with Exhibitors (Grand Ballroom	Salon A/B)
		Deep Dives/Panels	·
	Swannanoa	Victoria	Alexander
	Panel Session: Pre-Season Planning: Science toward Informed Decision-Making in the USDA Forest Service	Panel Session: Geospatial Situational Awareness for Wildfire Mitigation, Education, Prevention and Operations	Deep Dive: The Hard Truths of Living with Fire
	Moderator: Matthew P. Thompson	Moderator: Jerry McAdams	Moderator: Katie Lighthall
	Life First Culture Meets Unnecessary		
	Exposure Policy in Wildland Fire Emily Haire Pre-Season Planning and Collaboration in High-Suppression Forests	This interactive presentation will inloude a panel of presenters from both Operations and Mitigation, and will discuss ways to engage agency personnel and the community with more accurate geospatial data,	During this session they will be discussing a large event and go through a shared learning exercise to get at the hard truths related to implementing the Cohesive Strategy on a number of levels and what those mean in
4:00-5:30	Exposure Policy in Wildland Fire Emily Haire Pre-Season Planning and Collaboration in High-Suppression Forests David Flores Geospatial Tools for Effective Assessment and Decision Response Joe Scott	panel of presenters from both Operations and Mitigation, and will discuss ways to engage agency personnel and the community with more accurate geospatial	a large event and go through a shared learning exercise to get at the hard truths related to implementing the Cohesive Strategy on a
4:00-5:30	Exposure Policy in Wildland Fire Emily Haire Pre-Season Planning and Collaboration in High-Suppression Forests David Flores Geospatial Tools for Effective Assessment and Decision Response	panel of presenters from both Operations and Mitigation, and will discuss ways to engage agency personnel and the community with more accurate geospatial data, as opposed to anecdotal and unscientific data. Presenters: Jerry McAdams, Tyre Holfeltz, Tony	a large event and go through a shared learning exercise to get at the hard truths related to implementing the Cohesive Strategy on a number of levels and what those mean in terms of actions Presenter:

8:00 - 12:00				
	Registration Desk Opens			
	Grand Ballroom Salon C			
	The Essential Partnership Between Learning and Action High-functioning research-practitioner partnerships create critical linkages between research and practice that can uniquely leverage access, skills and capacity for better outcomes. Through a guided panel discussion, we will explore partnerships in place throughout the country and illuminate opportunities for session attendees to apply these concepts to their own work. Panelists include research professionals, cooperative extension personnel, and on-the-ground wildfire adaptation practitioners from across the country. Featuring: Michelle Medley-Daniel, The Watershed Research and Training Center Annie Schmidt, Washington State Fire Adapted Communities Learning Network Sarah McCaffrey, Rocky Mountain Research Station Forest Schaefer, Tahoe Douglas Fire District Branda Nowell, School of Public and International Affairs - North Carolina State University Jennifer Fawcett, North Carolina State Extension Richard Thornton, Bushfire & Natural Hazards CRC			
10:00 - 10:30		NG BREAK with Exhibitors (Grand Ballroom		
ielee lelje		Deep Dives/Panels		
	Swannanoa	Victoria	Alexander	
	Panel Session: Advanced Material Fire Shelters	Panel Session: Research Nexus Panel	Deep Dive: Holistic Disaster Planning - Integrating Wildfire Protection Plans with Hazard Mitigation Plans	
10:30-1200	Developing Wildland Shelters for Improved Performance in Fire Roger Barker and John Morton-Aslanis A Full-Scale Test of Fire Shelter Performance in Turbulent Flames John Morton-Aslanis and Roger Barker Field Testing Protocol for Wildland Fire Shelters Joseph R. Roise	Understanding the most efficient and effective way to support manager relevant science is particularly critical. Three of the largest fire research funders – the USDA Forest Service Research Branch, The Joint Fire Science Program, and the Bushfire and Natural Hazards Cooperative Research Centre – represent three different models for funding fire science research. This session will bring together discussants with experience with each of these models to provide a brief overview of the structure and its strengths and weaknesses as a starting point for a group discussion about what the most effective future support for manager relevant fire research would look like. Presenters Sarah McCaffrey, Richard Thornton, David Bruce, Stacey Frederick Closing Remarks	This session will cover the four steps of Wildland Urban Interface planning as outlined in "Planning for Wildfire in the Wildland-Urban Interface: a Resource Guide for Idaho Communities" (Miller et al., 2016), Idaho's seven standards for Wildfire Protection Plans, showcasing Idaho's agreement as a model of how to create a similar agreement between regulatory agencies, and integration howto's. Additionally, the presentation will include discussion of the hurdles Idaho has encountered with the development of these integrated plans, and will address solutions to common pitfalls in the planning process. Presenter: Tyre Holfeltz	