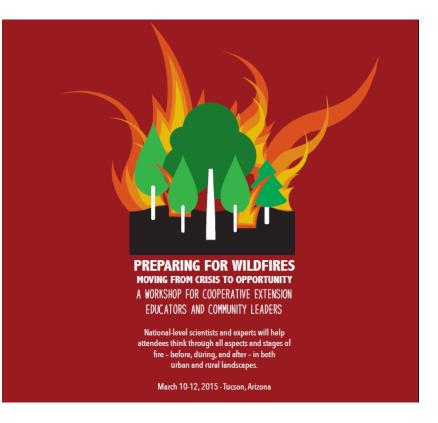
# **Preparing for Wildfires: Moving from crisis to opportunity**

## Workshop report<sup>1</sup>

#### BACKGROUND

The Western Extension Directors approached the Western Rural **Development Center and the** eXtension Wildfire Information Network (eWIN) with the request for a workshop designed for extension educators and community leaders located in communities that are being devastated by fire. Extension does play a role in community preparation for wildfire and coping with effects. The conference should not be focused on technical aspects of wildfire, but on how Extension can make a difference.



#### DESCRIPTION

This practical workshop provided Extension professionals and other community leaders with the tools to successfully face the challenges of living in fire-prone environments. One hundred workshop attendees deliberated through all aspects and stages of fire – before, during, and after – in both urban and rural landscapes. Local Extension personnel shared their challenges and success stories. The two day workshop took place at the Radisson Suites Hotel in Tucson Arizona, and included presentations and interactive discussions, with an optional educational field trip to Mt. Lemmon to learn about post-fire recovery activities.

<sup>&</sup>lt;sup>1</sup> Prepared by Janean Creighton, May 8, 2015

### PREPARING FOR WILDFIRES: MOVING FROM CRISIS TO OPPORTUNITY A Workshop for Cooperative Extension Educators and Community Leaders March 10-12, 2015 – Tucson, Arizona

#### **TUESDAY, MARCH 10**

7:00 – 8:00 Registration Check-in

8:00 – 8:10 Welcome and Opening Remarks – Workshop Co-Chairs Doug Cram and Julie Rogers

8:10 – 8:30 Why Are We Here? Part 1: An Experience of the Cedar Fire (San Diego 2003) – Fire Chief Colin Wilson (retired), Anderson Valley, California

8:30 – 8:50 Why Are We Here? Part 2: The Faces Project: The Story of the Victims of Southern California's 2003 Fire Siege – Bob Mutch, Consultant, Fire Management Applications

8:50 – 9:20 History of Fire in the West – Doug Cram, New Mexico State University Cooperative Extension Wildland Fire Specialist

9:20 – 10:00 The National Cohesive Wildland Fire Management Strategy: What it Means to You -- Katie Lighthall, Coordinator, Western Region, Cohesive Wildland Fire Mgmt. Strategy -- Craig Goodell, Fire Ecologist, Bureau of Land Management & U.S. Forest Service

10:00 – 10:30 Break and Poster Session

10:30 – 12:00 How Cooperative Extension Educators Make a Difference Before, During, and After Fires

-- Ed Smith, Living With Fire Program, University of Nevada Cooperative Extension

-- Stephen Fitzgerald, Oregon State University Extension Service, representing

the Citizen Fire Academy

-- Alan Long, Southern Fire Exchange and Tall Timbers Research Station

12:00 – 1:00 Catered Lunch

1:00 – 1:20 Primer on Fire Behavior – Stephen Fitzgerald, Oregon State University Extension Service

1:20 – 2:10 Buildings in Wildfire-Prone Areas: Assessing Vulnerabilities and Evaluating Mitigation Strategies – Dr. Steve Quarles, Insurance Institute for Business & Home Safety

2:10 – 2:30 Applying the Science: Preparing Your Home and Property for Wildfires – Fire Chief Colin Wilson (retired), Anderson Valley, California

2:30 – 3:00 Insurance Issues Before and After Fires – Emily Cabral, United Policyholders

3:00 – 3:30 Break and Poster Session

3:30 – 4:00 Applying a Network Approach to Growing Fire Adapted Communities – Nick Goulette,

Project Director, Fire Adapted Communities Learning Network

4:00 – 5:00 Interface Choices: Prepare / Go Early / Stay and Defend – Bob Mutch, Consultant, Fire Management Applications, Missoula, Montana

5:00 – 6:30 Reception/Social Hour

#### WEDNESDAY, MARCH 11

7:00 – 8:00 Registration Check-in

8:00 – 8:30 Welcome and Opening Remarks – Dr. Jeffrey Silvertooth, University of Arizona College of Agriculture and Life Sciences Associate Dean and Cooperative Extension Director; and Jeff Whitney, State Forester, Arizona State Forestry Division; with introductions by University of Arizona Cooperative Extension Agent Chris Jones

8:30 – 9:10 Sources of Science-based Information about Wildland Fires

-- Cooperative Extension Resources: EDEN, eWIN, and More – Glenn Nader, University of California Cooperative Extension

-- The Joint Fire Science Program's Fire Science Consortia – Andi Thode, Northern Arizona University and Southwest Fire Science Consortium

9:10 - 10:00 Invasive Species as Wildfire Hazards

-- Chris Jones, University of Arizona Cooperative Extension (Moderator)

-- Lindy Brigham, Southern Arizona Buffelgrass Coordination Center

-- Peter Warren, University of Arizona Cooperative Extension

10:00 – 10:30 Break and Poster Session

10:30 – 11:30 Community Action Models Before and During Wildfires: Lessons Learned in Mendocino County, California

-- Julie Rogers, Fire-Adapted Communities Specialist and Co-Founder of the Mendocino County Fire Safe Council (MCFSC)

-- Colin Wilson, Anderson Valley Fire Chief (retired), and Co-Founder of the MCFSC

-- Lauren Robertson, Founding President of Pine Mountain Fire Safe Council

11:30 – 12:00 The United States of Disaster: Fire and American Policy – Scott Knowles, Drexel University

12:00 – 1:00 Catered Lunch

1:00 – 1:30 The 2003 Aspen Fire: A Photo Presentation of the Need to Prepare – Michael Stanley, Manager, Mt. Lemmon Water District, Summerhaven, Arizona

1:30 – 2:10 Managing Landscapes After Fires Debris Flows and Flood Hazards – Ann Youberg, Arizona Geological Survey ; Deciding If and How to Help Your Property Recover – Susie Kocher, University of California Cooperative Extension

2:10 – 2:30 Special Considerations in Ranch and Rural Settings – Glenn Nader, University of California Cooperative Extension

2:30 – 3:00 Break and Poster Session

3:00 – 4:40 Roundtable Discussions and Report-Backs – 6-8 topics to be determined

4:40 – 5:00 The Community of Fire – Janean Creighton, Oregon State University Extension Service and Northwest Fire Science Consortium

#### WORKSHOP COMMITTEES

#### **Co-Chairs**

Doug Cram, Assistant Professor and Extension Wildland Fire Specialist, New Mexico State University Julie Rogers, Fire-Adapted Communities Specialist, Tucson, Arizona

#### **Steering Committee**

Don Albrecht, Western Rural Development Center Geoff Babb, Bureau of Land Management Doug Cram, New Mexico Cooperative Extension Catia Juliana, Association for Fire Ecology (web design) Betsy Newman, Western Rural Development Center Julie Rogers, Fire-Adapted Communities Specialist Barbara Satink Wolfson, Southwest Fire Science Consortium

#### **Program Committee**

Doug Cram, New Mexico Cooperative Extension Janean Creighton, Oregon Cooperative Extension, Northwest fire Science Consortium Stephen Fitzgerald, Oregon Cooperative Extension Timothy Ingalsbee, Association for Fire Ecology Christopher Jones, Arizona Cooperative Extension Mike Kuhns, Utah Cooperative Extension Glenn Nader, California Cooperative Extension Steve Quarles, Institute for Business & Home Safety Julie Rogers, Fire-Adapted Communities Specialist JoAnne Skelly, Nevada Cooperative Extension Ed Smith, Nevada Cooperative Extension Cori Dolan, University of Arizona, School of Natural Resources & the Environment

#### **WORKSHOP EVALUATIONS**<sup>2</sup>

For each of the following four topic categories addressed in this workshop, please rate the three statements below. 1 = Strongly Disagree, 5 = Strongly Agree, 6 = Not Applicable (N/A) N=50

| Workshop Topics   | Life safety issues<br>(such as<br>evacuation vs.<br>"prepare, stay,<br>defend" | Preparing houses<br>and surrounding<br>property so<br>homes survive a<br>wildfire | The beneficial and<br>historic role of fire<br>in maintaining<br>healthy<br>ecosystems | How to effectively<br>communicate the<br>latest & best<br>science to the<br>public |
|---|--|---|--|--|
| For each topic<br>rate these<br>statements:                                       |  |   |  |  |
| Current<br>issues/problems<br>adequately<br>identified                            | 4.7  | 4.8   | 4.4  | 4.2  |
| Solutions to those<br>issues/problems<br>were adequately<br>identified            | 4.3  | 4.8   | 4.2  | 4.0  |
| Resources for<br>gaining further<br>information were<br>provided or<br>identified | 4.5  | 4.8   | 4.4  | 4.3  |

Comments associated with the ratings above:

- True networking and abundance of various presenters resulted in great resources to move forward with.
- Until sound conservation practices are regularly implemented the agencies should not be allowed a "let it burn" card. Air system is constantly changing
- Great range of topics would like to discuss the role of wood industry in community fire protection
- Excellent
- Would have liked a broader set of examples from different extension agents & geographic areas. Would have liked more robust interactions and facilitated dialogue. Would have liked early introductions from all participants.
- More time should be spent explaining the dangers of stay & defend. If there is extreme fire behavior it's a bad idea.
- The subject matter was challenging
- Cohesive strategy talk missed the mark by not directly appealing to cooperative extension and its role.

<sup>&</sup>lt;sup>2</sup> Evaluation instrument provided by the SW Fire Science Consortium

- All aspects above were covered very well; however, I'd like to see how collaboration is done with lawmakers/legislature, etc.
- Great amount of resources provided. I don't know fire ecology or behavior but learned where resources are now and can better serve clientele.
- Many local barriers to "bringing fire back to ecosystems": air quality, public lands, fencing for livestock, livestock destroyed

Please rate your experience with, or knowledge of, the following topics **<u>before</u>** you attended the workshop and how this may change **<u>after</u>** attending the workshop

| Evaluation Statement <sup>1</sup>  | Before<br>workshop <sup>2</sup> | After<br>workshop <sup>2</sup> | Difference =<br>knowledge<br>gained |
|--|---------------------------------|--------------------------------|-------------------------------------|
| I knew/know that most people who have died in wildfires<br>perished because of being trapped while they were trying to<br>evacuate (N=50)            | 3.6                             | 4.7                            | +1.1                                |
| I knew/know that most homes will burn in wildfires ignited<br>by small wind-driven embers, not by huge walls of flames<br>(N=38)                     | 4.0                             | 4.8                            | +0.8                                |
| I knew/know that in many wildland areas fire is a natural<br>process that is necessary for the health of trees, other<br>plants, and wildlife (N=49) | 4.6                             | 4.8                            | +0.2                                |
| I knew/know how to communicate effectively with residents of wildland areas about scientific research findings pertaining to fire (N=48)             | 3.4                             | 4.2                            | +0.8                                |
| I knew/know where to find materials on the latest and best<br>available science about all aspects of fires in wildland areas<br>(N=48)               | 3.4                             | 4.5                            | +1.1                                |
| I used/will use knowledge of scientific research findings<br>about wildland fires in my work (N=49)  | 4.0                             | 4.7                            | +0.7                                |
| I shared/will share knowledge of issues covered in this<br>workshop with my colleagues, family, neighbors, or others I<br>serve                      | 3.7                             | 4.8                            | +1.1                                |
| Average of all items <sup>1</sup> 1=very little, 5=very much, 6=Not Applicable (N/A)   | 3.8                             | 4.6                            | 0.8                                 |

<sup>1</sup> 1=very little, 5=very much, 6=Not Applicable (N/A)

<sup>2</sup> Group means

With how many colleagues, family members, neighbors, or people you serve will you share the information you gained this week? (N=47)

| #'s of potential contacts | Participant responses | Percentage |
|---------------------------|-----------------------|------------|
| 0                         | 0                     | 0%         |
| 1-3                       | 4                     | 8.5%       |
| 4-6                       | 6                     | 13%        |
| 7-10                      | 10                    | 21%        |
| 11-20                     | 4                     | 8.5%       |
| 21-40                     | 5                     | 11%        |
| 41+                       | 18                    | 38%        |

If this workshop is held again in the future, would you recommend it to your colleagues, friends, and/or neighbors? (N=47)

| Yes, definitely | 42 | 89% |
|-----------------|----|-----|
| Maybe           | 5  | 11% |
| No              | 0  | 0%  |

#### Affiliation

| County extension     | 10 |
|----------------------|----|
| Extension specialist | 12 |
| Other academic       | 3  |
| Firewise             | 0  |
| Non-profit           | 8  |
| Local agency         | 7  |
| State agency         | 1  |
| Federal agency       | 1  |
| Private citizen      | 4  |
| Retired agency       | 5  |

#### Primary work area

| Public education | 14 |
|------------------|----|
| Firefighting     | 5  |
| EMT/IM           | 2  |
| EP               | 3  |
| Forestry         | 2  |
| Range/Ranch/Farm | 2  |
| Hydrology/Soils  | 1  |
| Invasive Weeds   | 3  |
| Collaboration    | 1  |

#### **Position Held**

| Planner      | 2 |
|--------------|---|
| Practitioner | 1 |

| Researcher              | 9  |
|-------------------------|----|
| Decision-maker          | 2  |
| Administrator           | 5  |
| Outreach/Communications | 20 |
| Other:                  |    |
| Retired                 | 2  |
| Management              | 1  |
| Coordinator             | 1  |
| Organizing/Networking   | 1  |
| Volunteer               | 1  |
| Humanities Professor    | 1  |
| Educator                | 1  |
| Consultant              | 1  |
|                         |    |

#### **ORGANIZATIONS REPRESENTED**

| CA Fire Science<br>Consortium | California Cooperative<br>Extension      | Utah State University    | Fire & Emergency<br>Management |
|-------------------------------|--|--------------------------|--------------------------------|
| NW Fire Science<br>Consortium | Washington State<br>University Extension | University of Arizona    | Socorro County New<br>Mexico   |
| SW Fire Science               | Oregon State University                  | Western Rural            | Cochise County, AZ             |
| Consortium                    | Extension                                | Development Center       | EMA                            |
| Pacific Fire Exchange         | University of Nevada                     | Living with Fire Program | Mt Lemmon Water                |
|                               | Extension                                |                          | District                       |
| Western Cohesive              | Southern Regional                        | Building Resilient       | Cascabel Volunteer Fire        |
| Strategy                      | Extension Forestry                       | Neighborhoods            | Department, AZ                 |
| US Forest service             | University of Hawaii                     | Fire Safe Council        | Logan Simpson Fire             |
|                               |  |                          | Planning Consultants           |
| Bureau of Land                | New Mexico State                         | Fire Adapted             | Fire Wise of SW                |
| Management                    | University                               | Communities              | Colorado                       |

#### ADDITIONAL COMMENTS:

- More discussion opportunities
- Enjoyed very much!
- This was a fabulous workshop!
- Excellent workshop. Need more!
- As a relative novice to the wildfire world, this workshop has been very beneficial to my understanding of issues related to land management and the necessity of fire. There are many conflicting interests involved. Great workshop! Worth my time!
- Great program! I will definitely recommend it!
- It was well put together and facilitated. I would have liked more info on dealing with the after. A place to share resources like a file share program would be helpful. Making slides or having key point handouts.

- Thank you for a well-planned conference. Julie and Doug did a great job.
- Great mix of folks even though geared to Extension. I learned more about Extension and those resources that will be a great benefit; encourage fire chief and federal agencies to participate. Thank you!
- Excellent variety of wildfire aspects. Well organized and presented. Great feature is that time and venue were planned so that relationships are fostered. What counts is public work.
- Well organized an excellent location. I appreciated the full spectrum of topics discussed and the people I met. This meeting reaffirmed that importance of face-to-face contact in information exchange. The meeting also provided a big picture perspective for the work I am doing with the national Cohesive Strategy in the Southeast region.
- Good information was shared throughout the course of the last two days. Would suggest presentations on work being done in New Mexico.
- I think framing this as a training was possibly not quite the right framing for a group with this much expertise. May be a bit more formal next; like hearing reports out from each state on what they are doing about wildfire in their area (extension programming).
- Liked the embers part. Did not realize the full threat even after years as a firefighter. Prepare, Go early or Stay and Defend was good with best Practices. Need to end some of the "running" the USFS by "public emotion" rather than science. Law allows too many lawsuits. Liked the ideas of Extension roles and examples of outreach.
- I'm not an extension agent so I learned a lot about CE's approach, their mission, and how much of an important role extension can/should play in addressing the issues associated with wildfire.
- I am just in awe of the wealth of information shared and finding out about Cooperative extension and what can be utilized.
- We are a community of fire!
- This was eye opening to the networks that are available and out there.
- Was very good and agendas were of our local impacts. Thank you! I learned a lot!
- Sincerely appreciate opportunity!
- An outstanding program of articulate speakers addressing hands-on grassroots audience!
- Phenomenal event. Many types of expertise presented, plus affordable! Bravo! Particular emphasis on open, inclusive workshop. Thanks!
- Learned that fire is not just a responsibility of forest service or other government agency, but there are roles that we can help with such as pre-fire planning, dealing with fire and after fire assistance.
- Excellent workshop! Well organized! Best workshop attended in several years. Would have been nice to sit in all the round table discussions. Provide at end of workshop, everyone with speaker notes, slides and videos or locations. Also, list of all handouts/flyers, etc. provided and where they can be obtained later.
- Excellent workshop. Enjoyed it very much.
- Very forest heavy. Would like to see more on shrub lands and rangelands. More science/examples of successful fire mitigation strategies. More information on quantifying fire risk. We can't control every fire. We must have fire resilient landscapes.

- Very good and informative workshop and definitely a need for this information. The challenge is going to be implementation and involvement from local agencies as well as funding. But definitely left with more info and resources.
- Great workshop! Logistics were well organized. Recommend fewer break-out groups to allow for more people in each group. Also recommend more varied speakers (i.e. different speaker for each topic rather than same speaker 2-3 times.) Variance in topics was great! Enjoyed the "swag" and book and look forward to the field trip.
- Good experience with good information. I think NM has more to add in program efforts in place within extension.
- Great location, great subject matter, and right audience and speakers. Great food. Thank you!
- Very good workshop. Most importantly useful to begin building a toolbox to address such issues. Very well done!
- We will use this to inform future discussions in CO and in the FAC learning network.
- Well run. Good job with details. Would have liked more facilitated dialogue among participants. This could have drawn out more of the individual and collective knowledge in the room and facilitated more relationship building.
- The location and presenters were excellent.
- Great conference. More Q and A time would be nice. I like round table discussions but there
  were too many to choose from and I would have liked to go to more than one. Especially liked
  "How CE educators make a difference..." "Primer on Fire behavior", "Insurance issues", "The US
  of Disaster", and "Special Considerations in Ranch and rural settings". All of those gave me new
  info or new ways of sharing info.
- Real Good.